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ABSTRACT

This catalogue describes thirty-two education programs developed by the State Department of Education of New Jersey. They include programs that improve basic skills in mathematics and language arts, offer career education and guidance, enrich curricula, enhance classrooms, school, and district administration, and are designed to raise the levels of achievement and quality of life for students, parents, staff, and the general community. Each program description includes the following information: an overview of the program; essential elements of the program; goals, evaluation designs, and results; costs; dissemination services and materials; and the name and address of the person to contact for further information. (JD)

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Educational Programs That Work

A CATALOGUE OF DEMONSTRATION SITES OF SUCCESSFUL EDUCATIONAL PROGRAMS DISSEMINATED THROUGH THE ELEMENTARY AND SECONDARY EDUCATION ACT, TITLE IV-C PROGRAM IN NEW JERSEY

The programs described in this catalogue have been validated as successful, cost-effective, and exportable by the standards and guidelines of the United States Office of Education. Designed to meet local district needs, some were developed by district funds, others funded by the Elementary and Secondary Education Act, Titles III and IV-C. Their dissemination is effected through funding from ESEA, Title IV-C.

T & E

SCHOOL IMPROVEMENT IN NEW JERSEY

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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January 1977

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STATE OF NEW JERSEY
DEPARTMENT OF EDUCATION
225 WEST STATE STREET
TRENTON, N. J.

OFFICE OF THE COMMISSIONER

January, 1977

It is with pride and pleasure that we bring to the attention of educators, laymen and parents our fourth edition of Educational Programs that Work, 1976-77. The thirty-two validated programs, twice the number in our last year's catalogue, were initiated and developed primarily by our local school districts in cooperation with the State Department of Education to solve local educational problems. They indicate by their quantity and quality the high level of interest in the school districts of New Jersey and their concerned dedication to improve and enrich the educational experiences of each child.

Under legislative mandate to provide a "thorough and efficient" education for their children, school systems may discover solutions to their own educational problems through the programs described herein. Broad in scope and diversity, they include programs which: improve basic skills in mathematics and language arts; offer career education and guidance; enrich curricula; enhance classroom, school and district administration -- all designed to raise the levels of achievement and quality of life for students, parents, staff and the general community. The programs may be adopted or adapted to suite a local district's specific needs.

To assist in the dissemination and diffusion of these programs, the State Department of Education has established four Educational Improvement Centers which serve as repositories for information and training materials and which conduct workshops and conferences on these programs for educators in their respective regions. We hope that local districts will avail themselves of the services offered.

We commend the staff members of the local districts who initiated and developed these projects and the State Department staff who assisted them, for their dedication, hard work and innovative contributions to educational improvement throughout the state. We welcome your comments and support of these programs.

Fred G. Burke

Fred G. Burke
Commissioner of Education
State of New Jersey

Materials prepared by the State Department of Education promote the dissemination of validated programs.

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INTRODUCTION

This is the fourth annual catalogue prepared by the N.J. Department of Education designed to present to interested educators, parents and laymen successful educational programs that are currently operative in the state. All of the 42 programs described herein were developed under the Elementary and Secondary Education Act Title III and IV-C and validated according to the standards and guidelines of the U.S. Office of Education as successful, cost-effective and exportable. Of this number, 31 were developed in the public schools of New Jersey, while 11 were developed in ten other states and have been replicated by New Jersey school districts. A new section in this year's Catalogue describes these imported programs.

To date, New Jersey has contributed 32 validated programs to the national pool; of these, 28 described in *Section I*, are funded through ESEA Title IV-C to offer dissemination services, materials and training opportunities to interested educators; three, described in *Section II*, can furnish written and audio-visual materials with limited consultant services; and one program no longer in operation, has incorporated its materials into another successful program. Broad in scope and diversity, these programs address populations ranging from preschool children to high school seniors, administrative personnel and adults. The potential of their impact upon students and adults in education is significant, since they involve a broad spectrum of society.

Initiated in 1965, ESEA Title III has enabled local school districts to design, field-test and disseminate innovative educational programs to meet the needs of their own children. Funds are provided annually for each state to allocate to school districts, on a competitive basis, for the development of new programs over a one to three year period, with expectations of support thereafter by local Boards of Education. Throughout this development phase, the N.J. Department of Education lends guidance and technical assistance in the design, field-test and evaluation of the programs.

Successful programs that achieve validation are funded to offer dissemination services to replicate the program in districts with similar needs. They serve as demonstration sites where educators may see the program in operation, confer with project staff, receive training and consultations services free of charge, and purchase materials at cost. The only expenses for the adopter district relate to costs of materials and teacher stipends for training. Through this diffusion process, projects can improve the education of children throughout the state.

In 1974, statewide efforts were augmented by a national dissemination network established by the U.S. Office of Education, whereby certain validated projects submitted for review by the Joint Dissemination Review Panel of the U.S.O.E. and National Institute of Education were approved and funded for national dissemination. Through this intrastate as

well as interstate capability, New Jersey's eleven nationally endorsed projects are now implemented in over 40 states, while 11 projects developed in ten other states are now adopted or adapted by 85 school districts in N.J. Thus distant dissimilar districts with similar educational problems can now share their solutions; the linkage system now established has fostered an interchange of successful programs among urban, suburban and rural environments. To date, 155 programs have been approved for national dissemination, with 145 funded for dissemination services. Descriptions of these successful programs are contained in *Educational Programs that Work*, 1976, prepared for the U.S.O.E. by the Far West Laboratory for Educational Research and Development.[1] Copies are available at the four Educational Improvement Centers.

Dissemination Formats

Using both the state-wide and national dissemination programs, New Jersey employs several dissemination approaches: First and most common is the basic *producer-consumer* model wherein the successful program is funded through ESEA Title IV-C as a demonstration site whose staffs offer training, materials and consultative services.

Second, awareness and training capabilities for both in-state and out-of-state projects have been established at the four *Educational Improvement Centers* which form the connecting link to local school districts. These Centers provide long-term dissemination potential for successful programs; serve as repositories for materials and audio-visuals which educators can examine freely; conduct a continuing series of workshops and conferences on topically-related programs; and supply trainers of out-of-state project for interested in-state educators.

Third and new this year as a dissemination mode are *clusters* wherein content-related programs are coordinated by "cluster expeditors" who promote awareness workshops for districts searching for programs to fill their student needs. Presently, cluster coordinators work with programs related to the basic skills in mathematics and language arts, management, and special education. A cluster comprising the four N.J. programs in career education and guidance will soon be organized.

A fourth mode of dissemination is through *materials* alone, as represented by the three programs listed in *Section II* which offer only limited consultation services. Materials can be published commercially with copyright and royalties going directly to the local producer district's Board of Education. Staff members from some programs are presently seeking commercial publishers, while two projects now follow this format for selected materials.

Finally, the *"college thrust"* is a successful method of dissemination through its impact upon undergraduate and graduate training in education. This thrust has three dimensions: First, training offered by several validated programs is now accredited by a number of colleges while curriculum content of others is included in courses; second, practicum and student teachers are involved with some of the projects; and finally colleges, particularly community colleges, can be adopters of programs, especially those in basic skills, career education and management.

[1] 1855 Folsom St., San Francisco, CA 94103

"T and E"

Directed by the state constitution to "provide for the maintenance and support of a *thorough* and *efficient* system of free public schools" the legislature in 1975 charged the N.J. State Department of Education with its implementation. They thereupon developed a "T and E" planning model which all public schools are required to use in setting their educational goals and assessment procedures. The six steps in the model are similar to those used in the development of programs under Title III/IV-C. They comprise:

1. Goal development
2. Establishment of assessment objectives
3. Identification of needs
4. Program development
5. Evaluation of educational program effectiveness
6. Budget review

As local districts determine their educational needs, the successful programs described in this catalogue can well advance their efforts towards educational improvements for children.

Additional information concerning the programs may be obtained from the project staff listed, the EIC's, the offices of County Superintendents, cluster coordinators, and the Dissemination Office of the Division of School Programs, Department of Education.

Educational Improvement Centers

EIC – Northeast	201-677-9600
EIC – Northwest	201-539-0331
EIC – Central	609-448-0484
EIC – South	609-589-3410

Dissemination Office – 609-292-8454, 8455, 7130

Jane Freedman
Millicent Mali
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Cluster Expediters

Language Arts: Helen Hanson, Rita Gavzy	201-786-5576
Mathematics: Wayne Rosenbaum	201-677-9600
Management: Harry Selover	201-786-5576
Special Education: Hilde Weisert	201-875-9505

SECTION I: Successful Educational Programs Whose Staffs Offer Complete Dissemination Services and Materials to Interested Educators

Academic Advancement Program
Mathematics and Language Arts

Morristown, N.J.

OVERVIEW

The Academic Advancement Program (AAP) is a program of individualized self-paced instruction in language arts and mathematics for grades six through eight and for remediation in the high school. It follows the precepts of mastery learning and is based on a sequential hierarchy of basic skills to accommodate a wide range of skill levels. The learning materials, commercially produced, have been reassembled into skill sequences adapted to meet the needs of heterogeneously grouped students. Students can move from one set of materials to another on one skill level or upward as mastery is displayed. Within an AAP classroom it is possible to find twenty or more students all working at different levels.

Designed as an alternative to ability grouping, the Academic Advancement Program attempts to solve the problem wherein a school district, using homogeneous classes, is outwardly desegregated but the classrooms are models of minority group isolation. The rationale behind the program is that ability grouping, especially in a community of cultural and racial diversity, discourages social integration, burdens children assigned to some groups with resentment and humiliation, and reinforces in them unfavorable self-concepts.

The program was developed to accommodate the wide range of skill levels among students in the Morris School District following the merger in 1972 of two separate districts to achieve racial integration. Its development involved teachers, teacher aides and administrative staff in planning the curriculum, assembling the basic units, training the teachers and aides, teaching and testing students, and evaluating the results.

ESSENTIAL ELEMENTS

The essential elements of the AAP are divided into two categories based upon their relationship either to the classroom teacher or to the administrator or project director of the program:

Classroom Teacher

1. Learning Materials
2. Instructional System
3. Monitoring System
4. Storage System for Materials
5. Classroom Organizational System
6. Use of Paraprofessionals

Administrator

1. Staff Selection
2. Supervision and Staff Support
3. Evaluation
4. Expansion and Refinement of the Program in the District

MATHEMATICS

The mathematics component comprises sixty-six units each containing precise instructional objectives with test items for each objective. The program covers a mathematics skill sequence from operations with whole numbers through the elements of a first year course in algebra.

LANGUAGE ARTS

The Language Arts component consists of a reading system, a composition system and a grammar/spelling/vocabulary system designed for use in a heterogeneous classroom. These systems use individualized, small group and large group instructional procedures.

GOAL, EVALUATION DESIGN AND RESULTS

The AAP goal was to disprove the major assumption of proponents of skills grouping that separation enhances student progress. Evaluation was based on 200 students in grades 6-8.

Goal: To show that learning in mathematics and language arts is not adversely affected when classroom organization is changed from homogeneous group instruction units to individualized instruction in heterogeneous units.

Evaluation: The Iowa Test of Basic Skills (1971 edition) was administered to both the AAP group and a control group under standardized conditions. Test results supported the hypothesis that heterogeneously grouped students in an AAP setting are not penalized. In addition, statistically significant positive differences were found at the eighth grade level for math concepts and math composite scores.

COSTS

The orientation, training and consultant services provided by the AAP staff to consumer districts are free of charge. Consumer districts are responsible for costs incurred by their staffs for training and the installation of the program. The initial acquisition of materials may cost as much as ten dollars ($10.00) per student, dropping after the first year to about five dollars ($5.00) per student thereafter. Storage facilities, a very necessary part of the program, should cost no more than $200 per classroom. These constitute an initial start-up investment. Aides are necessary for the teacher to get the program started. One aide serves 2 teachers and approximately 200 students in a departmental situation; in a self-contained classroom, aide service can be part-time for the periods assigned to math and language arts. As a smooth pattern of classroom activity is achieved, the need for the aide diminishes, since many of her tasks can later be accomplished by the teacher or the students themselves.

DISSEMINATION SERVICES AND MATERIALS

Validated in 1974, the Academic Advancement Program is funded by ESEA Title IV-C to provide orientation presentations, visitation opportunities, dissemination materials and training services to interested educators. General information may be secured upon request. A training program with follow-up consultations is available free of charge to school districts

that sign a commitment to replicate the program's essential elements. Consumer districts are requested to register one administrator with the teachers selected for training.

The program's curriculum material may be purchased at cost. These include:

Replication Manual for the Classroom Teacher (300 pages)	$6.00
Administrator's Guide	Free of Charge
Filmstrip/Tape Presentation	$5.00
Program Project Report — a descriptive brochure	Free of Charge

Order forms for the manuals and the Producer-Consumer Agreement required for training and consultation services may be obtained from the project director. Inquiries about the project, its materials and its dissemination plan should be addressed to him.

CONTACT PERSON

Joseph H. Dempsey, Director
Academic Advancement Program
Morris School District
40 Mills Street
Morristown, N.J. 07960
(201) 539-6100

Some of the materials for basic skills in mathematics developed by districts in New Jersey.

* Project ACTIVE:
All Children Totally InVolved Exercising

Oakhurst, New Jersey

OVERVIEW

Project ACTIVE is designed to meet the widespread need for individualized-personalized physical activity programs for handicapped children. The project staff trains teachers of special education, physical education, and recreation to prescribe individualized-personalized activities for children from prekindergarten through grade 12, evidencing low motor ability, low physical vitality, mental retardation/learning disabilities, postural abnormalities, nutritional deficiencies, breathing problems, motor disabilities/limitations, communication disorders or visual/auditory problems.

Teacher training programs have been conducted in New Jersey for four years for approximately 600 educators. As a result eighty districts, and fourteen private schools now use the program with approximately 10,000 students. The program is included in courses of five New Jersey teacher training institutions.

In 1974 and 1975, the competency based teacher training program and the motor activity and other program components were validated and approved by the Dissemination Review Panel of the U.S. Office of Education for national dissemination. Since 1975 districts in nine other states have installed the individualized-personalized ACTIVE program.

ESSENTIAL ELEMENTS OF THE PROGRAM

A replication of Project ACTIVE is defined by the following instructional requirements and implementation options.

*Approved for national dissemination.

Instructional requirements:

- two classes per school
- sixty minutes of instruction per week (two or three instructional periods)
- sixteen weeks per year
- utilization of the individualized-personalized ACTIVE learning process

Implementation may be in any one or a combination of these areas:

- Low motor ability
- Low physical vitality
- Nutritional deficiencies
- Postural abnormalities
- Breathing problems
- Communication disorders
- Motor disabilities or limitations

GOALS, EVALUATION DESIGNS, AND RESULTS

Goal #1

All public/private school physical educators, special educators and recreators participating in the training program will demonstrate proficiency in providing individualized-personalized physical education programs for handicapped children in their respective schools. The minimum level of performance will be the ability to perform 80% of the competencies (20 of 25) listed in the Teacher Performance Chart.

Eighty of the teachers trained in 1973-74 were pre- and posttested by project staff on the locally developed Teacher Cognitive-Psychomotor Test. The teachers' demonstration of twenty out of twenty-five competencies was the standard of success. All eighty teachers achieved the 80% level of mastery on the twenty-five competencies. Therefore Goal #1 was achieved above expectation, indicating that the training activities were successful in producing demonstrable skills in the participants.

Goal #2

Students with motor response problems, or handicapping conditions, who are prescribed motor activity programs commensurate with their individual needs for a minimum of sixty minutes per week will achieve motor performance scores significantly superior to students who participate in traditional physical education, plus classroom activities, or solely classroom activities during comparable time periods. [Handicapping conditions are defined as mental retardation (educable), perceptual impairment, neurological impairment, or emotional disturbance. Traditional physical education is defined as participation in individual, dual, or group games which do not consider the needs of each child.]

Three research studies were conducted. The subjects in the experimental groups were matched on the basis of age, sex and pre-test Motor Ability Indexes. (The Jersey City group was not matched.) Both the experimental and control groups were pre- and posttested over a six-month period of time via the Township of Ocean Motor Ability Test. This evaluation effort was conducted in 1973-74.

Statistical significance was achieved in:

- T-test for Matched Groups (Twp. of Ocean)
- Wilcoxon Matched-Pairs Signed-Rank Test (Asbury Park)
- Analysis of Covariance, two separate studies, male and female (Jersey City).

These results supported the conclusions that physical education activities prescribed on the basis of individual needs will improve:

- the motor ability performance of students evidencing low motor ability, mental retardation, neurological impairment, perceptual impairment, or emotional disturbance.
- the gross body coordination, balance/postural orientation, eye/hand coordination, eye/hand accuracy, and eye/foot accuracy of students evidencing low motor ability.
- the gross body coordination, balance/postural orientation, and eye/foot accuracy of students evidencing mental retardation, neurological impairment, perceptual impairment, or emotional disturbances.

Goal #3

Students with handicapping conditions who are prescribed physical activity programs commensurate with their needs for a minimum of two thirty-minute, or three twenty-minute periods per week will achieve psychomotor performance scores significantly superior to students who participate in traditional physical education, plus classroom activities or solely classroom activities.

All subjects were matched on the basis of age, sex, handicapping condition and pre-test scores. Both experimental and control groups were pre- and posttested over a four to six-month period. The Wilcoxon Matched-Pairs Signed-Rank Test was applied to the data in each of the nine studies. The .05 level (one-tailed) was selected to determine significance. This evaluation effort was conducted in 1974-75.

Statistically significant at or beyond the 0.01 level in favor of individualized instruction were the following:

- Four of the five physical fitness studies.
- The two nutritional studies. (The same data were analyzed twice – in terms of body weight and bone structure.)
- The two posture studies.
- The breathing problems study.

Thus, nine of the ten analyses revealed that individualized instruction was superior to group instruction in the attainment of psychomotor skill development.

COSTS

The project's development and training costs were funded through an ESEA Title III/IV-C grant.

Teacher training sites and pupils for the practicum experiences have been provided by institutions of higher learning and public and private agencies. Districts implementing the program receive the following supplementary materials and services free of charge:

- Monthly issue of the ACTIVE Newsletter
- Resource tasks and activities packets
- Certificates of Achievement for each handicapped child
- Individual time prescriptions (motor, physical fitness and posture)
- Statistical analysis of pre-post data
- Assistance in establishing school or district norms
- Assistance in conducting research studies
- Other consultant services as requested

Implementing districts are required to purchase the following program materials:

Motor Component		All Components	
Supplies	$50.00	Supplies/equipment	$500.00
Motor Model Kit	21.50	Total Model Kit	41.50

DISSEMINATION SERVICES AND MATERIALS

A brochure describing the project may be obtained free of charge from the project director. Visitation opportunities are available to educators who wish to see the program in operation.

In New Jersey the project staff offers both the complete forty-hour workshop and the mini-workshops on two or three topics several times and in several locations throughout the state. In states other than New Jersey both types of workshops are available. To be eligible

for these workshops, participants must agree to implement the program and furnish the project director with test data. The project staff offers consultation to persons trained including help with the preparation of prescriptions and the analysis of test data. There is no charge for the services of the project staff. Consumer districts are responsible for costs incurred by their staffs for training and the installation of the program.

The following materials may be purchased at cost; orders must be accompanied by checks or purchase orders made out to Township of Ocean Board of Education and mailed to the project director.

Development and Adapted Physical Education: A Competency-Based Teacher Training Manual	$7.50
Breathing Problems Test, assessment, prescription and evaluation procedures for teachers	4.00
Motor Disabilities/Limitations Test, assessment, prescription and evaluation procedures; student and teacher learning experiences, resource tasks and activities for teachers	4.00
Low Motor Ability An individualized/personalized program for enhancing low motor/perceptual motor performance	6.00
Low Physical Vitality Test, assessment, prescription and evaluation procedures; resource tasks and activities for teachers	4.00
Nutritional Deficiencies Test, assessment, prescription and evaluation procedures; resource tasks and activities for teachers	4.00
Postural Abnormalities Test, assessment, prescription, and evaluation procedures; resource tasks and activities for teachers	4.00
Communication Disorders Individualized-personalized program for individuals evidencing auditory handicaps, visual handicaps, aphasia and/or autism	4.00
Administrator's Manual Guidelines for organizing and administering the ACTIVE program	Price to be determined
Filmstrip-tape: "Competency-Based Teacher Training Program"	5.50
Motor Ability Duplicating Masters	1.00
Duplicating masters of all other test/administrative forms	3.00

The following manuals are currently in preparation and will be available:

ACTIVE TEACHER RESOURCE MANUAL: State and National Sources and Services
A compilation of sites, contact persons, products and services for teachers of the handicapped.

ACTIVE MOTOR ABILITY/PHYSICAL FITNESS NORMS MANUAL
A compilation of New Jersey and national norms based on chronological age (normal population) and mental age ("classified" population), i.e., M.R., L.D., etc. Also includes simplified procedures for establishing local norms.

ACTIVE RESEARCH MONOGRAPH:
A compilation of research studies related to the individualized-personalized effort, with implications for programming and subsequent research.

Inquiries about the project and its dissemination services and materials should be addressed to the project director.

CONTACT PERSON

Dr. Thomas M. Vodola, Project Director
Director of Research and Evaluation
Township of Ocean School District
Dow Avenue
Oakhurst, New Jersey 07755
(201) 229-4100, Extension 260

Career Analysis & Planning (Adult Vocational Guidance)

Woodbridge, New Jersey

OVERVIEW

The career Analysis and Planning Program is a service sponsored by the Woodbridge Township School District, designed to meet the career development needs of out-of-school youth and adults who are underemployed, unemployed or returning to the labor force. These individuals request and require help in clarifying what it is they have to offer to the world of work, information about what opportunities the world of work offers them, and help in building on their strengths to improve their career development. Some agencies in some communities deal with certain dimensions of these populations, but by and large, the overwhelming percentage of people in these categories have nowhere to turn.

The program is based upon a model of rational decision making which helps individuals clarify their expectations; gain insight into their potential; and make plans on how to go from where they are to where they would like to be. In addition, it helps individuals learn the skill of rational decision making so that they decrease their need for additional help when faced with the necessity of making changes in their career pattern in the future.

The program was developed over a three year period, 1972-1975, funded by an ESEA Title III grant. It was validated in 1975 and has been submitted to the National Dissemination Review Panel of the U.S.O.E. for approval for national dissemination.

ESSENTIAL ELEMENTS OF THE PROGRAM

Outreach Program – The Outreach Program is composed of multiple techniques aimed at making potential clients aware of the existence and benefits of the service. It includes the use of audio-visual packages, personal contact, presentation at group meetings, and use of all media and community linkages currently in existence in the community.

Testing – While some clients can be helped by simply answering requests for information, many others have never had an opportunity to assess objectively their own talents. The program offers a battery of tests, both paper and pencil and experiential, designed to meet this need. Major dimensions of this include the General Aptitude Test Battery and the Work Sampling Program of the Jewish Employment and Vocational Service, a job related simulation, offering the client an opportunity to experience over thirty different job related experiences. A trained observer is able to assess cognitive, psychomotor, and affective attributes of the client. This results in an extensive report that the client can use in making judgements concerning future career development plans.

Counseling – Regardless of the need for testing, an opportunity to talk to a trained counselor to interpret current reality and examine alternatives is extremely critical to the process. The unique dimension of the project's approach to counseling is its use of a career planning outline which not only assists the client in establishing plans, but begins to teach a planning process that can be used by the client in the future.

Referrals – As a counseling agency, it is critical to have a set of agencies who offer particular educational, training or therapeutic services that may be needed by a particular client in order to achieve career development objectives.

GOALS, EVALUATION DESIGN, AND RESULTS

1. To increase the development of appropriate career goals for clients as a result of program intervention.
   During the lifetime of the project, over 1,400 clients were serviced. Based upon a sampling of 43% of the clients, over 75% of them indicated significant improvement in their career development plans.

2. To develop plans that are practical and implemented.
   A result of the follow-up study mentioned above indicated that over 83% of the clients had selected and implemented appropriate first steps towards achieving their career objectives.

COSTS

Start-up costs include the facilities, basic testing material (the J.E.V.S. Work Sampling Program can be purchased for $7,000 including all necessary training in its implementation), and salaries of the counselor and clerk. The program can be expanded to include a work sampling evaluator as a para-professional and an Outreach community aide, if local conditions and budget warrant.

Operational costs call for a minimal amount of office and testing supplies and salaries.

DISSEMINATION MATERIAL AND SERVICES

Career Analysis and Planning is funded by ESEA Title IV-C as a demonstration site in Woodbridge where interested educators can see the program in action, examine the materials and receive training and follow-up consultation in its replication.

The staff has prepared an operations manual describing the procedures for establishing and operating the program (price to be determined) and a recruitment and dissemination slide-tape show. Further information about the program may be secured from the project director.

CONTACT PERSON

Bernard Novick, Associate Director
Career Planning & Continuing Education
Woodbridge Township School District
P.O. Box 428, School Street
Woodbridge, New Jersey 07095
(201) 636-0400

Center On Teaching

Parsippany-Troy Hills

OVERVIEW

The Center on Teaching (COT) was established to implement the *Spectrum of Teaching Styles*, research its impact on teaching and learning behavior, and develop training programs for teachers and administrators in its alternative teaching styles.

Conceived and developed by Muska Mosston[1], the Spectrum is a theoretical structure comprising seven alternative teaching styles ranging from Command to Discovery. It is an integrated theory which: shows the place of each style on the Spectrum; identifies the assets and liabilities of each; highlights the relationship among the styles rather than their disparity; and delineates the specific roles of both teacher and learner in each style. This *specificity* clarifies *expected behaviors* for both teacher and learner in a given episode. It does *not* promote a single teaching style since human learning behavior is multiple, warranting several teaching styles. Operating on the theory that the same learner is capable of different learning styles at different times, it trains teachers to employ alternative teaching styles. By thus providing mobility along the Spectrum, teachers and administrators are encouraged to eliminate their own general idiosyncrasies, personal opinions and random teaching behavior in favor of developing objective methods and teaching assessments which will enhance their impact on the cognitive, affective, social, and physical development of their students.

Since its inception, the Center has done experimental work with teachers, administrators and students in a variety of subject matter areas and on all educational levels, focusing on the refinement of the *deliberative* behaviors of the teachers in each style along the Spectrum, thus improving the relationship between the given teaching style, the stated objectives and learning behaviors.

[1] Mosston, Muska, *Teaching: From Command to Discovery*, Wadsworth Publishing Co., Belmont, California 1972.

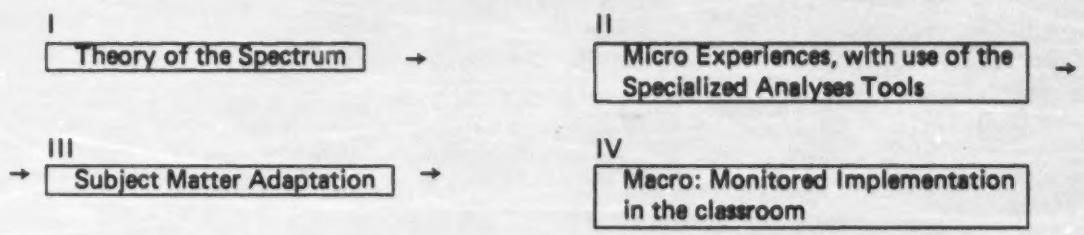
The Spectrum provides teachers and administrators with the following:

1. A theory of alternative styles.
2. The anatomy of each style which serves as a guide for specific behaviors.
3. The specific learning goals accomplished by each style.
4. A basis for a *rational* training program.
5. *Objective* analysis tools (developed by Sara Ashworth), used during training and during implementation.
6. *Objective* procedures and analysis to be used by teachers and administrators in order to determine whether or not the *teacher's intent and action are congruent.*
7. A training program which analyzes the implications of each style to: classroom organization and management, the impact of verbal behavior on a social interaction, material design, etc.

Together all these offer an opportunity for sharper insights into what happens to students during their learning experiences, their growth, their agonies and joys.

ESSENTIAL ELEMENTS OF THE PROGRAM

The program's replication of one or more styles in a new site is defined by participating in the four steps as prescribed by the C.O.T.:



GOALS, EVALUATION DESIGN AND RESULTS

Goals: 1. Spectrum teachers will give significantly more individual attention to students during class time than Control teachers (both in terms of frequency of individual contacts and in percentage of class time used for giving individualized attention).

2. Spectrum teachers will spend significantly less time than Control teachers dominating classroom academic discussions.
3. More efficient use of class time will be made in Spectrum classes than non-Spectrum classes. Specifically, Spectrum students will pay closer attention in class; class pace will be faster; less time will be wasted getting started; students will spend more time on school work; students will give their teachers fewer discipline problems; and students will waste less time than non-Spectrum students.

Evaluation: The evaluation techniques used three sources of data: student and teacher questionnaires administered both years of the study and a systematic analysis of videotapes of actual classroom sessions by Spectrum and Control teachers. Care was taken to get control teachers and students comparable to the trainees. To determine where differences exist-

ed between Spectrum and non-Spectrum classrooms, the strategy was to measure those traits of teachers and students which have strong relationships with student achievement: time spent on task; teacher time spent with individuals; less teacher domination of academic discussion; attention; and class pace.

Results: Goal one was decisively confirmed. In two studies Spectrum pupils reported they received more individual attention from teachers than did non-Spectrum pupils. In both years Spectrum teachers reported giving more individual attention than Control teachers. Finally, analysis of videotaped classroom episodes showed that Spectrum teachers spent over twice as much time as Control teachers in academically oriented interactions with individual students. Conclusion: Spectrum teachers appear to give more individual attention.

Goal two was clearly supported. Results of the chronometric analysis of the classroom videotapes showed that Spectrum teachers spent less than half as much time as Control teachers in such activities as disseminating information, lecturing, and reading aloud. Conclusion: Spectrum teachers appear to display less domination of academic discussions.

Goal three was also achieved. In both 1975 and 1976, Spectrum students reported moving at a faster pace and paying closer attention than non-Spectrum students. Other trends in the *student* questionnaire data for both years favored the Spectrum: fewer discipline problems, more time spent in hard work, and less wasted class time. These trends were also seen in both years in the comparisons of the reports of Spectrum and Control *teachers*. The chonometric analysis of classroom videotapes indicated that slightly less time was wasted in Spectrum classes. Conclusion: There appears to be more efficient use made of class time in Spectrum classes.

The experimental work was conducted with administrators and teachers in South Brunswick's Constable Elementary School and Crossroads Middle School, and in Red Bank Regional High School over a 3-year period, 1973-76[2]. The program achieved validation in 1976.

COSTS

The costs of replicating the program include:

1. Staff training
2. Rental for videotape equipment
3. Materials at cost
4. Film – nominal rental fee
5. Services of C.O.T. staff are free of charge

DISSEMINATION SERVICES AND MATERIALS

A brochure which describes the project is available free of charge from the Center on Teaching. Visitation opportunities are available to educators who wish to see the Spectrum in operation.

[2]The Research and Evaluation study was conducted by Dr. Richard C. Anderson, Director, Laboratory for Cognitive studies in Education, Univ. of Illinois, Champagne-Urbana, Illinois.

The C.O.T. offers *3 options* for training:

Option 1 – Training in *any one* style
Time: 3 days for training, 1-2 months monitored implementation.
Option 2 – Training in *two* or more styles
Time: 5 days for training, 2-3 months monitored implementation.
Option 3 – Training in the *entire* Spectrum
Time: 10 days for training, 4-6 months monitored implementation.

To be eligible for the C.O.T. programs:

1. The school must identify an administrator(s) who will be trained and assume responsibility for the continuation of the program. (The number of administrators depends on the number of participating teachers.)
2. The participants must agree to follow through with the four steps of the program outlined as essential elements.

The following materials are available from the Center on Teaching (cost to be determined):

1. **Film "Teaching: From Command to Discovery"** (The Spectrum of Teaching Styles)
2. **Brochure – General description of the program**
3. **Training Manual**
4. **Workshop materials**

Inquiries regarding the program, dissemination services and materials should be addressed to the project director.

CONTACT PERSONS

Muska Mosston, Director
Sara Ashworth, Program Coordinator
133 Benner Street
Highland Park, N.J. 08904
(201) 246-0474

Creative Reading Approach

Trenton, New Jersey

OVERVIEW

The Creative Reading Approach (CRA) is a beginning language reading program developed for urban children in kindergarten and first grade and designed to promote language reading ability through teacher-pupil creativity. Combined into one program are three reading approaches, all overlapping: language experience, linguistic approach and individualized reading. Students follow behavioral objectives which cover all three areas.

Developed in three years, 1973-1976, under funding by ESEA Title III/IV-C, and validated in June, 1976, the project produced original songs, worksheets, and stories. Children

are encouraged to make illustrations, which can be put on dittos, and compose stories which are duplicated by the teachers for classroom and district reading. They learn new concepts and skills quickly and pleasantly. They are also encouraged to sing along informally with original musical language-reading cassette tapes.

As the children become more proficient in reading the stories they have written based on their language experience, they cover objectives in decoding by working with a decoding booklet created by the teachers. The objectives and "easy-to-read" stories were written by the teachers during summer workshops. As the children complete the decoding objectives, the individualized reading section of the program becomes important. This includes teacher-student conferences, directed reading lessons in small groups, and a "buddy system" wherein an advanced student is paired off with one who needs help.

Teachers plan grouping and instructional programs using interclass modified flexible grouping determined by child readiness. A 90-minute block of time for language-reading instruction is essential.

ESSENTIAL ELEMENTS

The program's replication in another site is defined by:

1. Use of the CRA package with emphasis on the musical language reading and mastery sheets.
2. Ninety minutes of instruction every day for first grade pupils.
3. Interclass modified flexible grouping.
4. Teacher workshops for the development of their own ideas and materials to fit the needs of their district.

A three-day introductory workshop enables teachers to become knowledgeable about the CRA program; two one-day workshops during the year allow teachers to develop and add their own ideas and materials to fit the CRA package to the needs of children in their district.

GOAL, EVALUATION DESIGN AND RESULTS

Goal: Project children will score significantly higher in comprehension at the end of first grade than other children with similar language and socio-economic background.

Evaluation Design: The effectiveness of the CRA Program was established by comparing end-of-year achievements in reading by a group of first graders participating in the program (Experimental Group) with a comparable group of first graders taught by other methods (Control Group). In 1974, 1975, and 1976, mean raw scores in reading comprehension as measured by the Gates-MacGinitie Primary Reading Test were compared for the Experimental and Control Groups, using an analysis of covariance design. The covariant in 1974 consisted of kindergarten scores on the Gates-MacGinitie Readiness Skill Test; in 1975, of kindergarten scores on the Murphy-Durrell Reading Readiness Analysis Test; and in 1976, of beginning first grade scores on the Metropolitan Readiness Test (Level I).

Evaluation Results:

1. The project children scored significantly higher in comprehension than the control group.
2. The project children had significantly greater numbers of students working at higher reading levels than the control group.
3. The bilingual children in the CRA group were in higher reading levels than the bilingual children in the control group.

COSTS

Training and consultant services provided by the project staff are free of charge, funded by ESEA, Title IV-C. Consumer districts are responsible for costs incurred by their staff for training (stipends or substitute pay) and installation of program.

The costs of replicating the program are primarily for the Teacher's Manual and the CRA Language Reading Package which will be available at approximately $85. The cassette tape recorders needed for the program and ditto paper for the masters can probably be absorbed in district budgets.

DISSEMINATION SERVICES AND MATERIALS

General information about the program is available upon request. A brochure describing the project may be obtained free of charge. Visitation opportunities are available to educators who wish to see the program in operation.

The Grant School in Trenton, N.J. is the demonstration site, although the program is operative at two schools. Information about visitation days may be obtained from the project director.

The project staff has prepared the following materials:

Technical Brief	Free of Charge
Teacher's Manual	Price to be determined
CRA Language Reading Package (serves several reading groups)	Price to be determined (approximately $85)

The package contains the following:

40 Preprimers (10 copies of 4 books)
3 Easy-To-Read books
6 Language and Decoding audio tape cassettes
8 Booklets for audio tapes (5 copies of 8 books)

Ditto Masters for the following:

The Parent Supplement (40 pages of progress and success reports to go home)
1 CRA Readiness Test (10 pages)
250 Worksheets
Patterns for five hand puppets

Filmstrip-cassette presentation (currently in preparation) **Price to be determined**

The CRA project staff offers training services and follow-up consultations on a limited basis at no charge. Inquiries about the project and its dissemination services should be addressed to the project director.

CONTACT PERSON

Chanda L. Moore, Project Director
Cook School
Trenton, N.J. 08609
609-882-5519 (home)

Project CYCLE

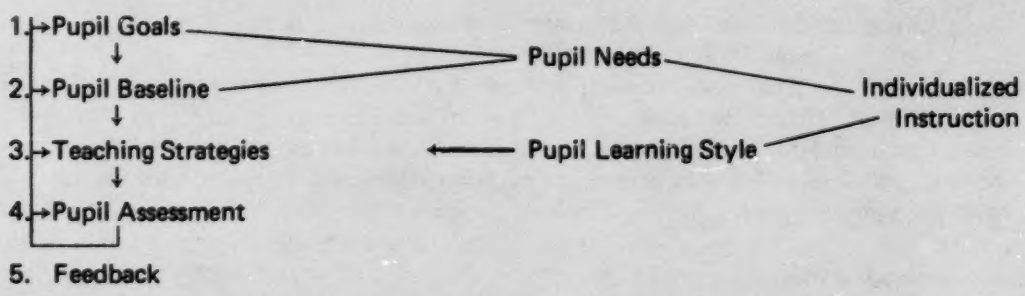
Newton, New Jersey

OVERVIEW

Project Cycle is an integrated management system designed to achieve, through individualized instruction, a thorough and efficient education for a community's children (K-12). The cycle process consists of five components:

1. Goal setting
2. Baseline data collection
3. Strategy selection
4. Assessment
5. Feedback

These five steps are implemented at four levels: the *system, building, program* and *pupil* levels. The basic assumption of the project is that use of the system's approach to educational decision-making at every level of the school system will facilitate the implementation of individualized instruction. Individualized instruction is defined as instruction meeting the needs of a child in the way that he/she learns best. If the needs of the pupil are met he/she is receiving a *thorough* education. If the pupil is learning in the way that he/she learns best, it is *efficient* education. The needs are defined as the difference between the child's goals – Where he would like to be – and the baseline – Where he is now. The way that the child learns best is translated into the use of a proper teaching strategy. The relationship of these various components is shown in the following diagram.



The project is based on the availability of a computer. The following management functions are performed on it with local staff who are *operators*, not *programmers*.

1. Pupil attendance, which includes the printing of monthly registers and year-end reports
2. Monthly program budget status reports
3. Student report cards grades 3-12
4. High School scheduling with weekly updates, honor roll lists, etc.
5. District payroll

This is in addition to the rapid processing of data needed for program development.

1. Program Assessment—This process is called CAM—Comprehensive Assessment Monitor
2. Student Assessment – This process is called SAM – Student Achievement Mastery
3. Student Diagnosis—This process uses the baseline data system

An adopting district need not develop all the procedures necessary for the successful implementation of the project, since these have been developed.

Funded by ESEA Title III, the program was developed over a three year period, 1972-75, and achieved validation in 1975. It can be combined in implementation with any project, with the expectation that any curriculum program using the process will achieve greater progress for children.

ESSENTIAL ELEMENTS OF THE PROGRAM

Specifically the project integrates:

1. Community developed school and system goals
2. Teacher developed program and student objectives
3. A baseline data system supported by a mini-computer consisting of:
   a. System-wide program budgeting
   b. Individual pupil data (6 years)
4. Organizational change strategies consisting of:
   a. District-wide program development support
   b. Administrative team
   c. Program team planning and teaching
   d. Individualized instruction
5. Program and student assessment using teacher developed criteria reference procedures
6. Individualized pupil progress reporting

GOAL, EVALUATION DESIGN AND RESULTS

The goal was the implementation of a system or process to provide a thorough and efficient education for children at all levels of education.

The evaluation team was provided evidence that each step of the process had, in fact, been achieved. This evidence was in the form of completed product (i.e., a validated and board approved set of goals, a demonstration of the baseline data system, strategy selection method, and assessment procedures). In addition, the scores of the children enrolled in a math program using the Cycle process were shown to be significantly greater than children not enrolled in such a program. The pre-post experimental and control group model was used in this analysis.

COSTS

The cost of replicating the project varies from district to district. If a district curriculum coordinator already exists, his duties can include program assessment and data flow responsibilities. (It is essential that the data necessary for program adjustment be given quickly to the program team members.) If this person does not exist then he becomes a start up cost. The same goes for teacher aides and school work room facilities. Many districts also have in-house or service bureau computer services. If data processing equipment is already owned and used by a district, the addition of a mini-computer to the operation can save a great deal of time and money. The computer used in the project costs approximately $27,000.00. The basic cost of project implementation, assuming staff and equipment already exist in a district, is staff training and computer software purchase or rental. This amounts to approximately $13,000.00 for each of the first two years in a district of 2,500 pupils. Continuing costs are approximately $5,000.00 per year. If no staff or equipment exist, the start-up costs are approximately $116,000.00 for each of the first two years with continuation costs running approximately $65,000.00 per year.

DISSEMINATION MATERIALS AND SERVICES

The program is funded for dissemination by Title IV-C. General information about the program is provided in a technical brief, project overview and a series of news stories. These are available without charge. Implementation manuals, a sound filmstrip and program manuals will be available at cost, price to be determined. These include:

Implementation Manuals:
1. Goal Setting Process
2. Baseline Data Process
3. Reorganization Strategies
4. Program and Student Assessment

Program Manuals:
1. Math Programs, 1976-77
2. Physical Education Programs, 1976-77
3. Industrial Arts Programs, 1976-77

Awareness sessions for potential adoptors are available on request. In-depth awareness and training are conducted at the Newton School District. When a district has made commitment to the project, it is essential for all administrators and teachers to be trained. This activity is conducted free of charge by a training team from the Newton School district and extends over two days, comprising general as well as group work sessions. In addition, 2-3 hours per week of planning time are necessary for each school staff. Requests for information, visitation, materials or services should be addressed to the project director.

CONTACT PERSON

Dr. Harry H. Selover
Assistant Superintendent
Newton Board of Education
57 Trinity Street
Newton, New Jersey 07860
(201) 383-1900 Ext. 120

* Dale Avenue Project

Paterson, New Jersey

OVERVIEW

The Dale Avenue Project is a comprehensive developmental skills hierarchy for early childhood education, prekindergarten through third grade. The skills are written as performance objectives, sequentially ordered, in listening, naming, observing, speaking, perceptual motor skills, writing and motor skills, classification, mathematics, encoding-decoding, and seriation. On entering the Dale Avenue School each student is given diagnostic tests to assess the level of his or her skill development in the ten skill areas. Students work on one skill at a time in each area of the Performance Objectives. They are taught in small or large groups, or individually, depending upon need. They begin learning a new skill in each area only after mastering the previous one. As students move from one grade to the next, their skill mastery record moves with them. Teachers can therefore maintain the continuity of the curriculum's developmental sequence for a five year period of time.

The developmental skills of the Dale Avenue Performance Objectives can be taught with virtually any curriculum materials. Thus, skills in listening, speaking, naming, and observing can be taught in social studies lessons about community helpers. Students may learn seriation and mathematics skills while running a grocery store in the classroom. Classification skills may be developed in science lessons. And the encoding-decoding skills can be incorporated into a standard reading program. Teachers develop lessons to teach specific skills and vary the activities as students master the skills that they are working on and move onto more difficult ones.

The parents of the Dale Avenue School's students have a strong organization. They volunteer to be teacher aides, work in the library, greet visitors, and inform the community about the program.

The development of the Dale Avenue Project was funded from 1970 through 1973 by the New Jersey Elementary and Secondary Education Act, Title III program. Validated in 1973, the project was endorsed for national dissemination by the Dissemination Review Panel of the United States Office of Education. Developed with an urban population, the program has been implemented in districts of widely varying characteristics, both rural and suburban, in New Jersey and other states. The out of state adoptions are concentrated in small towns and rural areas with no minority groups.

*Approved for national dissemination

ESSENTIAL ELEMENTS OF THE PROGRAM

The program's replication in another site is defined by:

1. use of the Dale Avenue Performance Objectives as a pre and post diagnostic test of student skill development,
2. use of the Performance Objectives as the basis of students' curriculum through the third grade,
3. the parent program.

GOAL, EVALUATION DESIGN, AND RESULTS

Goal

To bring the average academic performance, including I.Q., of urban, educationally disadvantaged students up to the national norm and maintain this gain for three years.

Evaluation Design

A random sample of students in the prekindergarten classes of 1969-70 and 1970-71 formed the experimental group. Their progress through the Performance Objectives was evaluated during the three years of the project's developmental grant. There were four control groups for the experimental classes at each grade level, during each of the three years. At each grade level two of the control groups were from educationally disadvantaged populations and two were from educationally advantaged populations. For each year, the scores of the experimental and control groups on the Peabody Picture Vocabulary Test (PPVT) were compared, and the skill level of the experimental group was measured on the Stanford Achievement Test and the Performance Objectives themselves.

Evaluation Results

The test data indicated that the Dale Avenue students made significant gains in their I.Q. measures from entrance into prekindergarten, when the mean I.Q. was in the low eighties, through kindergarten, and then maintained I.Q.'s at the national norm through the first and second grades. Although the project's development concluded in June '73, a random sample of students on the PPVT taken in 1973-74 and 1974-75 showed that the mean I.Q. of the second and third grade students remained at the national norm.

The test data also indicated that the Dale Avenue students did not attain I.Q. scores as high as those of the educationally advantaged control groups. Significant differences in favor of the Dale Avenue students, however, were found between the experimental groups and the educationally disadvantaged control groups in the same grades.

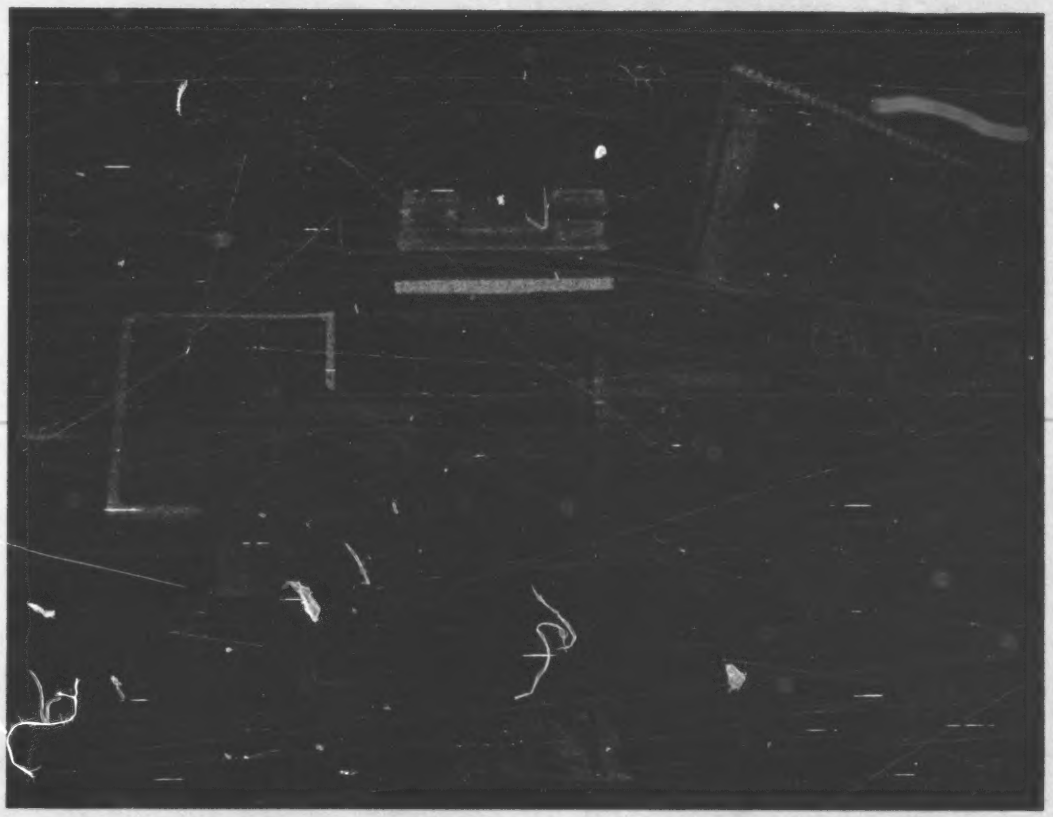
The results of the Stanford Achievement Tests showed that the first and second grades in the Dale Avenue School were performing at grade level in reading and mathematics. Their mean scores in the Performance Objectives showed gains in the skill areas of listening, naming, speaking, writing and motor skills, classification, mathematics, encoding-decoding, and seriation. By the end of the second grade, students were able to perform all of the perceptual motor skills.

Continued testing in 1973-74 and 1974-75 with the Stanford Achievement Tests showed that students in the third grade were at the national norm in reading and mathematics. Furthermore, in 1974-75 the fourth grade students who had followed the Performance Objectives for their first five school years maintained reading and mathematics scores at the national norm and continued this achievement as fifth graders in 1975-76. It should be noted that these students were now dispersed among schools throughout Paterson and followed a variety of educational programs.

Out of state adoptions have shown significant statistical gains, even among children who entered school with average scores in I.Q. and skill development.

COSTS

The cost of replicating the program is basically that of staff training, follow-up supervision, and evaluation. Provision must be made for the continuing help, encouragement and support of staff. The program's maintenance cost should not require an increase in the current operating expenses of most districts. In fact, some districts may find that the use of the Performance Objectives will reduce the students' need for remediation, which should decrease operating expenditures.



DISSEMINATION MATERIALS AND SERVICES

The Dale Avenue School is funded by ESEA, Title IV-C as a demonstration site where visitors may see the program in action, examine its materials, and talk to the staff. One day per week is set aside for visitors. Limited visitation opportunities are also available in the Plainfield and Burlington public schools and in the parochial schools of the Paterson-Passaic diocese. Complete information about visitation opportunities may be obtained from the project director.

The overview brochure which describes the project is available free of charge. A 28 minute color film, narrated by Gary Merrill, entitled "What comes after ten, Tasha?" describes the project in action and may be borrowed free of charge from the project. The film may also be borrowed for one week from the N.J. State Museum film lending library, West State Street, Trenton, N.J. 08625; it is coded as film #12082.

For educators who sign a commitment to replicate the program, the Dale Avenue Project staff offers free of charge a 2½ day training program plus follow-up consultation. To be eligible for training a district must show evidence of intent to use the information and willingness to answer questionnaires to evaluate the use and results of the program's replication. Inquiries about training should be sent to the contact persons listed below.

The following materials prepared by the project staff are available at cost.

Dale Avenue Performance Objectives Manual (68 pgs.) and **Teacher's Guide** (72 pgs.) (sold only as a unit)	$10.00 for both	**Test Manual to Accompany the Performance Objectives** (116 pgs.)	3.50
Manual on Special Area Performance Objectives – Art, Home Economics, Music and Physical Education (72 pgs.)	2.50	**Record Book for Recording Individual Student Progress** (36 pgs.)	2.00
		Administrator's Guide (88 pgs.)	3.50
		Final Project Report (96 pgs.)	2.50
Learning Activities for the Dale Avenue Performance Objectives (267 5" x 8" cards boxed for easy reference.)	15.00	**100 Sequential Skill Stations** (Learning Centers to accompany specific performance objectives.)	7.50

Checks or purchase orders should be made payable to: Educational Improvement Center – South and mailed with an order for materials to: The Dale Avenue Project, c/o Project Center, Division of Research, Planning and Evaluation, Department of Education, 225 West State Street, Trenton, N.J. 08625.

CONTACT PERSONS

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Requests for visitation should be made to:
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Dale Avenue School
21 Dale Avenue
Paterson, New Jersey 07505
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Differential, Data Based Educational Programming for Teachers and Students

Palisades Park, New Jersey

OVERVIEW

Differential, Data Based Programming for Teachers and Students provides a step by step process of teacher training and student instruction to achieve an efficient education in the basic skills of reading, math, and spelling. Developed in a 12 district special education region in suburban-exurban Bergen County, New Jersey, the program addresses a K-12 population, where student classifications include: emotionally disturbed, neurologically impaired, socially maladjusted, multiple handicapped, and the retarded. Despite previous progressive approaches, the level of student achievement and continuing behavior problems prompted this new "systems approach" to improve both teacher and student performance. Integrating a variety of proven techniques – contingency management, precision teaching, individualized instruction, use of performance objectives and reinforcement – the project first trained its Special Education and regular teachers according to the model by using individualized and performance based approaches to improve their techniques in the classroom. Secondly, the "systems approach" was applied to the students in the form of behavior development and "high intensity" reading and math systems.

The program has two major components:

1. Training of regular class teachers by special education teachers to equip them for working with special students. Skills are identified in two areas:
   a. *Responsive teaching,* comprising a compendium of techniques used by teachers approximately 3 hours per day: to improve students' motivation and social behavior.
   b. *Individualized instruction* in reading and math, 40 minutes, three times per week: to improve students' academic performance.
2. Training of special students in needed survival skills – both social and cognitive.

The curriculum used for reading is a modification of the Random House High Intensity Reading System and for math, the Math Modules published by New Century Education Corporation. However, a replicating district may use existing curriculum materials according to a set of instructional objectives which can be purchased at minimal cost, and still obtain comparable student results.

ESSENTIAL ELEMENTS OF THE PROGRAM

The program's replication in another site is defined by 1) the use of a "systems approach" in the teacher training program and in the classroom, 2) identification of students' needs in skill and behavior areas, 3) the application of individualized instruction and responsive teaching to meet those objectives exactly.

GOALS, EVALUATION DESIGN, AND RESULTS

Goal #1

Students will improve significantly in reading, mathematics and spelling. Pre- and post-administration of the Wide-Range Achievement Test showed virtually all students gained considerably and the mean of the group on all three sub-sections (reading, spelling, and math) showed a statistically significant gain.

Goal #2

Students will improve in social learning behavior through responsive teaching. The Becker In-Class Observation System and coding categories showed that the class as a whole made a statistically significant gain in on-task student behavior percentages between pre- and post-observations, whereas the control group, not exposed to responsive teaching techniques, showed no specific gain, and in some instances a decrease in on-task student behavior. The test data indicate that gains in the cognitive area of reading, math and spelling far exceeded those expected in a special education class with students in these classifications. Moreover, the gains exceeded the previous rates of growth achieved by the students tested.

For the second objective, comparison of test and control groups demonstrated the success of responsive teaching techniques. Students whose teachers applied Responsive Teaching Skills improved significantly in their social behavior, such as attention to work and co-operation. Such changes were not seen in classes of teachers who did not apply the critical skills.

COSTS

The project's development and training costs were funded from 1972-1975 through ESEA, Title III grants. The cost of replicating the program is basically that of staff training, follow-up supervision, materials and evaluation.

DISSEMINATION MATERIALS AND SERVICES

Validated in 1975, the project staff is funded by ESEA Title IV-C to offer dissemination services free of charge and materials at cost.

The project staff has prepared the following materials:

1. **The Teaching Skills Kit** (Individualized Instructional Pathways for Teachers). System of assessing and prescribing for critical teacher skills in two skill areas, Responsive Teaching and Individualized Instruction. The Kit includes:

   a. *Kit Manual,* a list of the critical objectives in Individualized Instruction and Responsive Teaching; pretests for identifying which of these skills each teacher needs; forms for monitoring progress; and posttests for assessment of mastery after training.

   b. *Kit Cards,* which provide, for each objective, alternative ways to acquire the skill. In some cases they include references to a specific article, section in a book, film, or filmstrip. (The two essential manuals referenced in the Cards are project-developed and listed below.) In other cases, the Cards give activities for groups or individuals, or short readings.

The Teaching Skills Kit can be used by the teacher trainer to plan courses tailored to the needs of his teachers, or by the teacher on his own.

2. Two manuals keyed to the Skill Kit and the basic materials for mastery of the objectives:

   a. **Learncycle Teachers Section,** a manual on Responsive Teaching principles and practices, and

   b. **Learning Centers,** a manual on how to set up "systems" learning centers in any area, with specific inventories in reading and math, for varying ages and classifications of students.

3. **The Administrators Guide** provides a complete overview of the program and alternatives in its adoption.

Together, *The Teaching Skills Kit,* correlated manuals *Learncycle* and *Learning Centers,* and the *Administrators Guide,* provide a school district with an effective system of in-service training to help the teacher acquire teaching skills and the student acquire cognitive and social skills essential for mainstream success.

Inquiries about the project, its dissemination services and materials should be addressed to the project director.

CONTACT PERSONS

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ESSP
* Educational Services for Schoolage Parents

New Brunswick, N.J.

OVERVIEW

This program was developed at New Brunswick's Family Learning Center to provide educational, nutritional and social services for pregnant students. Pregnant adolescents and their offspring are high risk individuals . . . educationally, medically, and socially. Pregnancy is the greatest single cause of females dropping out of school. The children of adolescents are more likely to die in the first year of life than those of any other age group; they are usually of lower birth weight (less than 5.5 pounds); and more likely to grow into children with low I.Q.'s, perceptual and motor disturbances, and speech problems than are babies of higher birth weights. Pregnant teenagers often have an academic history of poor motivation, excessive absence, and truancy. Their educational prognosis is, therefore, usually poor.

The program was initiated in September, 1969 through an ESEA Title III grant and is now fully supported by the local Board of Education. The Family Learning Center has served an average of 53 students per year, with 25-40 students enrolled at one time. Students come from grades 6 through 12, are enrolled as soon as a doctor certifies they are pregnant and the parents have given permission, and remain in the program for six weeks after returning from a 2- to -3 week maternity leave.

Girls in the program are given instruction in three areas:

1. *academic subjects* – a highly individualized instruction which continues, as closely as possible, the subjects the girl has been studying;
2. *family life education* – includes instruction in nutrition, food preparation, sewing, consumer economics, etc.
3. *maternal and child health* – anatomy, human reproduction, growth and development, heredity, hygienic and dietary habits, techniques of labor.

*Approved for national dissemination

The Center also provides *health* and *counseling* programs for the students. The *health* program includes pre-natal care by a hospital out-patient clinic or private physician, post-natal consultation by pediatricians employed by the Center, and a breakfast and lunch program where students apply the facts they have learned about nutrition and food preparation. The *counseling* program covers the initial orientation visit to the family of the teenager; an abbreviated case study of the student (students with severe problems are given intensive case work-up); group counseling sessions with the students (topics include the role of the father, the father's rights and obligations, the feasibility of future dating, their role as mother, theories of child raising, and the emotional and practical problems of returning to school); and facilitation of the students' communication with appropriate agencies (child-care, psychiatric service, marital and family counseling for fathers who want this service).

The only physical features essential for the program are facilities for the students to prepare their own breakfast and lunch. Required equipment includes kitchen utensils, basic medical diagnostic equipment (scale, stethescope, examination table), and basic baby furniture (crib, playpen, etc.).

Validated in 1973, this program was endorsed for national dissemination in 1974 by the Dissemination Review Panel of the United States Office of Education.

ESSENTIAL ELEMENTS OF THE PROGRAM

The program's replication in another site is defined by 1) instruction in the three areas of academic subjects, family life education, and maternal and child health, including the lunch program; and 2) availability of health and counseling services of pregnant students.

GOALS, EVALUATION DESIGN, AND RESULTS

Goal #1

Student participants will show a dropout rate significantly lower than that for pregnant students in the district prior to the beginning of the program.

In the seven years prior to the beginning of the program, 126 girls known to be pregnant dropped out of school and an alternate program of home instruction was provided. In addition, many others dropped out with no reason, who may have been pregnant. In the four years of the program, September, 1969, through June, 1973, of the 177 girls who participated in the program, only 19 have dropped out of school. Comparing pregnancy-dropout ratios pre- and post-program implementation, the difference in the number of dropouts was highly significant. Thus, the program has succeeded in keeping girls in school and enabling them to attain their high school diploma.

Goal #2

Babies born to participants in the program will be significantly healthier than the State's norm for babies born to adolescent women.

"Healthier" was operationally defined as having a birth weight of 5.5 pounds or higher. The goal was measured by determining the proportion of babies of low birth weight for both New Brunswick and the State as a whole to determine if there was a significant difference.

Of the 177 babies born to students during the four years of the program only one baby was of low birth weight, (the mother had leukemia). The data clearly shows that the incidence of low birth weight babies is significantly lower in the New Brunswick program than in the State or nation.

In 1975, a Schoolage Parent Program Research Grant was awarded to the Family Learning Center to undertake a study to discover:

1. *Why* the incidence of low birth weight infants born to young mothers attending the Center has been very low (less than 2% as compared with the state average of 19% and the national average of 18%).

2. How the supplemental feeding program followed at the Family Learning Center demonstrates beyond doubt its value in terms of healthier young mothers and infants, including nutrient metabolism and utilization.

3. If the infants born to the young mothers indicate that their mothers' experiences at the Family Learning Center have benefited them through its effect on the mother's knowledge about child health, child rearing and the important areas affecting the children. The study, longitudinal in nature, will examine the infants from birth to five years of age, concentrating on several basic areas of concern such as:

a. Health history
b. Physical examination, health and nutritional status
c. Morbidity patterns, i.e., illness, hospitalization, etc.
d. Psychomotor growth and development
e. Intellectual and cognitive status

Results of this research are in the process of completion and indicate great promise.

COSTS:

Start-up costs depend upon available facilities in the district. Most high Schools have home economics rooms adaptable for the program, and many churches have the necessary facilities.

Operational costs are two-fold, comprising staff salaries and the breakfast and lunch program. In New Jersey, 50% of the salaries for the program are reimbursable under the Beadleston Act and 20¢ per student per day reimbursable under the State's School Breakfast Program. The National School Lunch Program reimburses the district 66¢ per student per day. The total per pupil cost for operating the program is $1298; with the above reimbursements, the per pupil cost to New Brunswick is $813.

Since New Jersey law requires schools to provide five hours of educational instruction per week to each student unable to attend school because of pregnancy, the per-pupil maintenance cost of the program is no higher than that of home instruction formerly provided, thereby enabling New Brunswick to maintain the program with its own funds.

DISSEMINATION SERVICES AND MATERIALS

Interested visitors are welcome at the Family Learning Center to see the program in action, examine its materials, and talk to the staff. Complete information about visitation opportunities, orientation presentations, and limited inservice training may be obtained from the project director or dissemination consultant. Project staff members and consultants have

prepared the following materials which may be purchased at cost. Checks or purchase orders should be made payable to the New Brunswick Board of Education and accompany an order.

Brochure (brief description of project)	Free
ESSP (Educational Services for Schoolage Parents) **Resource Manual for Administrators and Teachers**	$4.00
Filmstrip-tape: Overview of Project ESSP	6.00 (may be borrowed)
Filmstrip-tape: Organization and Curriculum of Project ESSP	10.00 (may be borrowed)
Nutritional Guidelines Necessary in the Implementation of Programs for School-Age Parents	1.50
Significant Aspects of Maternal and Child Health in a Program for Schoolage Parents	1.50
So We Were Pregnant — Significant Case Histories of Schoolage Parents	2.00
Prelude and Prologue — An Overview of Our Changing Times in Meeting the Challenge of the Tremendous Upsurge in Schoolage Pregnancy	2.50
The Psychological Needs of the Pregnant Adolescent	1.50
Pioneering a Program for Schoolage Parents including Necessary Model Components	2.00
Schoolage Girls and the Law	1.50
Financing Programs for Schoolage Parents	1.50

Inquiries should be addressed to the Director of Pupil Personnel Services or the Dissemination Consultant, formerly the Project Director.

CONTACT PERSONS

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* Glassboro's Right to Read Program

Glassboro, New Jersey

OVERVIEW

This reading program, developed for children in kindergarten through grade three, is used in two elementary schools whose approximately 750 students are 82% white and 18% black. During 1972-73 and 1973-74 the reading instructional levels of these children were raised an average of 1.5 years per eight month instructional period. Started in 1971-72, its development was continued through a Right to Read grant from the United States Office of Education from 1972 to 1974.

The Glassboro Right to Read program has two essential elements: The first is a comprehensive *assessment* of student reading competencies, staff capabilities in the teaching of reading, and parental interest in reading programs. Second, based on this assessment, a program of staff *development,* reading instruction, and parental and community support is drawn up and put into operation. Both the assessment and program development are the responsibility of a Local Unit Task Force appointed by the superintendent and comprised of district staff members and community representatives.

1. Upon entering the program each child receives a teacher administered diagnostic battery of reading tests. Teachers use the test results to ascertain each child's instructional reading level according to an array of reading skills for kindergarten through grade three. Teachers then write individual instructional sequences for each child which they follow either on a one-to-one basis or with small groups of children who are at the same developmental stage. Each child progresses at an appropriate rate for his developmental level.

2. The staff development program is directed by the Reading Coordinator. Topics covered include the development of instructional materials and classroom management procedures which complement the individualization of reading instruction.

*Approved for national dissemination

As a result of community interest in the program an organization of parent volunteers has been formed whose members serve as classroom aides and reading tutors.

Validated in 1974, the project was endorsed for national dissemination by the Dissemination Review Panel of the U.S. Office of Education. Its dissemination in New Jersey is part of the total state Right to Read effort of the Division of School Programs, Department of Education. The project staff can accommodate a limited amount of dissemination work in states other than New Jersey.

GOAL, EVALUATION DESIGN, AND RESULTS

Goal

A growth rate of 1.5 years in reading achievement during an eight month instructional period will result from the placement of each child at his or her instructional level of reading and individualized teaching of reading at that level.

This program involves all teachers and all children in the primary unit, i.e. Academy Street School and J. Harvey Rodgers School. Both schools are ungraded levels K-3. Approximately 750 children and 25 teachers in two schools have been involved in the program. It was an experiment without a control group. Children were given pre and posttests to assess individual gains, identify average gain levels, and describe growth among groups in the two schools. For the 1972-73 school year, The Classroom Reading Inventory, published by the William Brown Company of Dubuque, Iowa, was used. The testing indicated that in 1972-1973 there was an average gain of 2.14 years among children of all reading levels. Students, therefore, exceeded the goal.

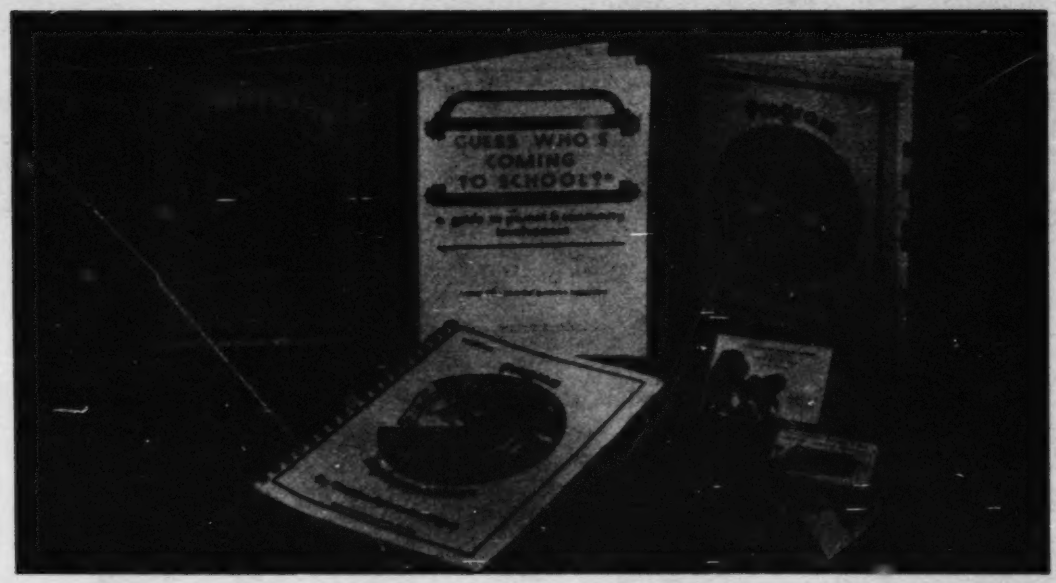
In the program's second year, 1973-74, a decision was made to change from The Classroom Inventory to the Houghton-Mifflin Informal Reading Inventory for the evaluation, because the Houghton-Mifflin IRI instructional level findings are more compatible with the array of skills design used by the project. The instrument was unavailable for pretesting in 1972. Pretesting occurred in September, 1973 and posttesting in April, 1974. The average gain across all instructional levels was 1.52 years. Thus in both development years the program achieved its goal.

COSTS

Replication costs are primarily those of staff development. Provision must be made for ongoing staff supervision and support. Costs for materials can be covered through a reallocation of current expenditures, and should not increase current budget levels.

DISSEMINATION SERVICES AND MATERIALS

The Glassboro public schools have been funded by ESEA, Title III as a demonstration site where visitors may see the program in operation and talk to participating staff. Requests for a visit or a program brochure should be addressed to the Reading Coordinator. The project staff has prepared the following materials available at cost. Checks or purchase orders should be made out to the Glassboro Board of Education in ordering materials. Order forms are available from the project staff.



Filmstrip-Tape: "Every Child Has the Right to Read: An Overview of the Glassboro Right to Read Project"	$12.00
The Project Description: Project Overview	1.66
Program Planning Guide: The Glassboro Right to Read Project	2.90
Program Implementation Guide: The Glassboro Right to Read Project	2.15
Parent and Community Manual: Guess Who's Coming to School?	.85

The project staff is available to New Jersey districts for the following workshops:

I Project Overview: Glassboro Right to Read Program
II Developing the Plan for a Right to Read Program: The Glassboro Experience (offered in two parts)
III Reading Skills Array: K-6
IV Use of the Diagnostic Battery to Assess Student Skill Level in Reading and Reading Related Skills: K-6
V Diagnostic-Prescriptive Teaching: Planning Materials and Classroom Organization
VI Role of Paraprofessionals: The Glassboro Experience
VII Record Keeping

The training services of the project staff are free of charge. On a limited basis the project staff can work with districts in other states who make a commitment to replicate the entire program and evaluate its implementation. Further information about the project and its dissemination materials and services may be obtained from the Reading Coordinator.

CONTACT PERSONS

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Project HEAR
(Human Educational Awareness Resource)

Willingboro, N.J.

PROJECT hear

OVERVIEW

Project HEAR is a career education curriculum for grades 4-12, designed to provide students with a wide range of information which they can use to make career decisions. The focus is in three parts:

1. extending the knowledge of one's own ability (needs, skills, strengths, aptitudes, motivations)
2. extending the knowledge of available careers
3. creating exercises which promote experiences in choosing and eliminate career stereotypes.

This approach is used in each of the three curriculum units - Primary (4-6), Intermediate (7-9) and Secondary (10-12). The purpose is to provide students with a meaningful and realistic exploration of the world of work, and to remove myths and stereotypes from career choices. The materials are non-sexist, ungraded, skill-building, student-centered, sequentially organized and experiential. They can be used in any existing classroom structure with any discipline, and for multiple learning needs. The materials were field-tested in 13 school districts with 3,000 students in New Jersey.

The development of Project HEAR was funded by ESEA Title III/IV-C over a three-year period from 1972-1975. It was validated in June, 1975 and can be seen in use in two N.J. districts, the Willingboro Township School District, a suburban community with strong urban characteristics, and East Orange, an urban community with a large minority student population.

ESSENTIAL ELEMENTS OF THE PROGRAM

The program's replication is defined by the use of any curriculum unit or combination thereof for thirty-five classroom sessions (30-35 minutes per session) within a 45 day period, and by district participation in individually designed seminars which facilitate the successful implementation of Project HEAR. The three curriculum units include the following components:

Primary Learning Unit (grades 4-6)

Teacher's Manual
"Whatcha Gonna Be?" – 30 consumable workbooks
"The Storybook" – 30 individual student storybooks
"What Can I Be?" – cartooned filmstrip/cassette recording
"Images" – set of 30 unique slide visuals

Intermediate Learning Unit (grades 7-9)

Teacher's Manual
"Whatcha Gonna Do?" – 30 consumable student workbooks
"A Couple of Compendious Vignettes or Two Short Stories" – 30 student storybooks and occupations information catalogue
"Images" – set of 48 unique slide visuals
"Hear's Careers" – simulation card game and score pad
"A Guide for Women: The Law & Employment" – 30 brochures on legal rights

Secondary Learning Unit (grades 10-12)

Teacher's Manual
"Working It Out" – 30 consumable workbooks
"The Dreamer" – cartooned filmstrip/cassette recording
Occupational Resource System – an occupational manual key-sort with occupational variables
"A Guide for Women: The Law & Employment" – 30 brochures on legal rights

A school district may adopt any combination of the three learning units at any point in time. Each unit is used independently with no prerequisite requirements.

GOALS, EVALUATION DESIGN AND RESULTS

Goal

1. Elementary school students who participate in the program will show a significantly greater change in perception of occupational stereotypes and greater preference for sex asynchronic occupations (occupations in which men/women outnumber each other by a ratio of 2:1) than a matching control group.

2. Middle school students who participate in the program will demonstrate a significantly greater increase in knowledge of the world of work than a matching control group.
3. Secondary school students who participate in the program will demonstrate a significantly greater increase in consistency of occupational preference with occupational interest than a matching control group.

Three evaluation instruments were developed to measure the learner outcomes. The experimental design is a pre-post experimental to control group contrast for all three objectives.

Results

Change in Occupational Stereotypes

1. *Primary students (4-6).* On the basis of the statistical and supportive evidence, Project HEAR has a statistically significant effect in changing both the occupational stereotypes and preference for sex asynchronic occupation of elementary school students who participated in the program.
2. *Intermediate Students (7-9).* Experimental students showed a statistically significant greater increase in scores on a test of occupational information than did a matching group over the same time interval.
3. *Secondary Students (10-12).* Experimental students showed a statistically significant greater increase in the number of occupational preferences consistent with occupational interest than did a matching group over the same time interval.

Spinoff Findings

The Project HEAR test instrument indicates that:

1. Before program intervention, twelfth grade males had well-crystallized and clarified values most important of which being economic stability and independence; whereas female values were less crystallized and clarified. After the program intervention, there is evidence of greater value clarification.
2. Increased consistency of occupational preference and student estimates of abilities and aptitudes result in more realistic levels of aspiration. Black and white students show different patterns of response with regard to consistency of preference with estimated ability. Although the program did not achieve a significant level of improvement in consistency in this area, it did show a trend in this direction. White students tended to over-estimate – to have an unreasonably high level of aspiration, whereas black students tended to under-estimate – to have an unreasonably low level of aspiration. The program tends to move in the direction of increased consistency for both groups.

COSTS

Replication costs relate to release time for staff training and the purchase of Project HEAR materials. District needs determine the number of training seminars, as well as the scope, content and format of the training design. Training services provided by the Project staff are free of charge to N.J. districts. Teacher/administrator training in the use of the materials is minimal.

DISSEMINATION AND SERVICES

The Primary Learning Unit is priced at $59.45, the Intermediate Learning Unit at $56.08, and the Secondary Learning Unit at $86.24. Ten percent (10%) above cost is required for shipping and handling of all curriculum units which include materials for 30 students and a teacher. Continuing use of Project HEAR requires the yearly replacement of the student workbook — the only consumable product. Materials are available for inspection at the offices of the Project Director, or of the State Department of Education.

Project HEAR is funded through ESEA, Title IV-C to provide dissemination services to interested educators. Members of the Project staff are available to visit school districts to explain the program. During the adoption period, Project HEAR staff provides consultation and follow-up services with teachers, students, administrators, parents, Boards of Education and community members.

Individually-designed seminars address the specific needs of the district personnel to facilitate successful program implementation.

Requests for general information or for on-site visitations to demonstration classrooms should be addressed to the project director.

CONTACT PERSON

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Project HEAR
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Princeton, New Jersey 08540
(609) 921-1484

* Individualized Language Arts: Diagnosis, Prescription and Evaluation

Weehawken, N.J.

OVERVIEW

This project was designed to develop effective methods of analyzing students' writing, and to prescribe and apply individualized instructional techniques to teach greater writing facility. The project's rationale is that linguistics, the study of language, provides knowledge which can be translated into techniques for improving writing instruction. These techniques can be blended with a language-experience approach, so that the language, feelings, and ideas of students can be used to promote motivation, precision, and control. Such instruction uses writing activities in all parts of the curriculum and can be organized within a diagnostic-teaching framework. Teachers and students can thus have continuous diagnosis of the writing needs, prescription of relevant methodology, and evaluation of results.

The project staff devised both a method for teachers to analyze students' writing, and guidelines, strategies and specific examples of how to teach writing. The method also includes ways for teachers to develop and reinforce other language arts skills. The approach can be used with either graded or non-graded classes in any kind of classroom organization.

Students' writing development is traced by three samples, taken at three intervals during the year. The evaluation of the samples, based on criteria suggested by language arts experimentation and the Weehawken teachers, pinpoints each student's current strengths and needs. Writing instruction is related to speaking, listening, and reading activities, as well as to the student's ideas and feelings.

The program is used in grades 1 to 12 throughout the Weehawken public schools. The student population is highly mobile and includes many students for whom English is a second language. The program's methods and materials were developed cooperatively by the project staff, Weehawken administrators and faculty members, and the students themselves. In Weehawken the program has completely replaced writing workbooks and textbooks. It may be fully integrated into any curriculum. The program is fully explained and illustrated with examples in a teachers' manual. No additional reference materials are required.

Validated in 1973, the project was approved in 1974 by the Dissemination Review Panel of the United States Office of Education for national dissemination and is currently used by 44 districts in New Jersey and over 40 in other states. Adopter districts serve rural, suburban and urban populations.

*Approved for national dissemination

ESSENTIAL ELEMENTS OF THE PROGRAM

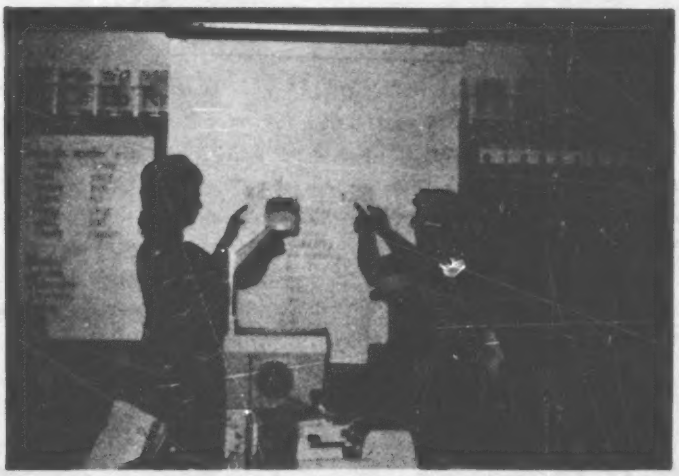
The program's replication is defined by 1) diagnosis of students' writing needs, 2) prioritization of local objectives for students' writing, 3) prescriptive teaching according to the techniques described in the program's manual, 4) evaluation of students' progress, and 5) use of the writing program in content and skill areas such as science, reading, etc.

EVALUATION DESIGNS AND RESULTS

The Weehawken project has been subjected to a number of evaluations, all of which have demonstrated the success of the program in improving students' writing ability. The first evaluation, conducted in 1970-71, was based on a statistical evaluation of random samples of papers written eight months apart by Weehawken students in grades 3 and 6 and compared to that of control groups in a nearby district. An evaluation was also made of continuing Weehawken students in grades 4 and 7.

The evaluation was based on eleven criteria selected from research and teachers' diagnoses. Five criteria were adapted from the work of Dr. Kellogg Hunt of Florida State University, who has shown how the syntax in children's writing changes with maturation. The remaining criteria came from the Weehawken teachers themselves, who were using the compositions for their own diagnoses of the students' strengths and needs in writing. These criteria represented the major needs of the Weehawken students.

This evaluation showed that the Weehawken students learned to write longer, richer, and more varied sentences. A simple or complex sentence, or an independent clause inside a compound sentence, is what Dr. Hunt calls a "T-unit"; the average number of words per T-unit is the most significant sc[illegible]n correlating students' writing ability with grade level. On this score the sixth-graders re[illegible]ed a gain of over 45% in a single year, which put them well ahead of both the control group students and the youngsters whom Dr. Hunt himself had studied. The Weehawken students were also writing longer dependent clauses, using more series of words to convey greater amounts of information, and moving parts of their sentences around to a larger extent to vary their writing style and give better emphasis to



the most important words and phrases. Above all, the students tended to write a higher proportion of complex and compound sentences and fewer simple sentences, one of the surest signs of growth in writing. They also had a better grasp of punctuation and correct spelling.

The evaluation disclosed that the Weehawken students had progressed in three ways: They had gained longitudinally with respect to most of the criteria; they had shown considerably greater improvement than the control group students taught by traditional methods; and, finally, they had scored far better on the relevant criteria than had students in Dr. Hunt's research population. This last point is especially impressive, for the young writers whom Hunt studied were middle-class children for whom English was the first language. The Weehawken students, on the other hand, included a large number of students for whom English was a second language.

Follow-up study in the program's second year indicated that these same students have generally continued to show improvement in their writing. The compositions themselves also showed growth in important non-syntactical aspects of writing: The students' vocabulary, for instance, was rich, varied, and mature and their stories revealed a clear sense of purpose and sequence.

An evaluation of more direct relevance to classroom instruction was made during 1974-75, involving three New Jersey consumers of the Weehawken program: one rural, one suburban, and one urban. The evaluation included a composite population ranging over grades 1-5, with comparison groups on the same grade-levels in two of the districts. Three writing samples were taken during the year in both the experimental and the comparison-group classes. By the end of the year, the Project students had substantially out-performed the comparison groups at statistical significance. The best performance was shown in the *urban* district, where very young children (second-graders) significantly surpassed the comparison group on all eleven criteria.

At the other end of the educational spectrum, during that same year and again in 1975-76, the Project program proved itself equally effective on the *college* level. In a state college in New Jersey, freshmen taking remedial-writing courses were given pre- and posttests of writing proficiency and wrote sample themes. Twice in a row, the classes which registered the highest average gains were those taught by the four instructors (out of a dozen) who had used elements of the program. It is noteworthy that the students who showed such gains in these remedial classes had failed to respond well to conventional methods of teaching Composition all during their elementary and high school careers.

COSTS

The ESEA, Title III development grant covered the stipends for the project staff and consultant help provided by Professors Ted Lane and Edwin Ezor of Jersey City State College, and several members of the district staff: the Elementary Education Supervisor, the head of the high school English department, and principals.

The cost of replicating the program relates to staff training and follow-up supervision. Provision must be made for continuing help, encouragement, and support of staff by local supervisors who have been trained along with the teachers. The manual written by the project staff is available at cost. Materials to introduce the program (file folders, duplicating

papers, etc.) can be absorbed within present budgets. Savings may be realized if the district staff discontinues use of special workshops or textbooks to teach writing, as in the Weehawken system.

DISSEMINATION MATERIALS AND SERVICES

General information about the program may be obtained from an overview brochure, available free of charge. The following materials prepared by the project staff are available at cost and may be ordered from the project director, accompanied by checks or purchase orders made payable to the Weehawken Board of Education.

Individual Language Arts: A Prospectus	$1.00
Teacher's Resource Manual	10.00
Filmstrip	To be determined

The project staff offers a two-day training session plus follow-up consultation to educators who make a commitment to replicate the program. There is no charge for the training services of the project staff. Information about the program and its dissemination services and materials should be addressed to the project director.

CONTACT PERSON

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* Institute for Political and Legal Education

"Turning Students on to Active Citizenship"

E.I.C.-So., Pitman, New Jersey

OVERVIEW

The Institute for Political and Legal Education (IPLE) has devised a curriculum wherein high school teachers and students in twenty-seven New Jersey districts participate in a community-based social studies program designed to provide high school students with practical experience in, and understanding of, politics, government and the law. This curriculum "to turn students on to active citizenship" encompasses three units: voter education; the decision making process in state, county and local government; and individual rights. All units in the year-long course are independent of each other and can be offered as mini courses. The IPLE staff conducts the initial training required of teachers adopting the program. A student from each adopting district is encouraged to participate in the training sessions and these subsequently serve as student leaders and peer teachers. The Institute provides supplementary activities throughout the year for teachers and students, which include workshops on specific aspects of the curriculum, plus a three day Model Congress. The staff has prepared resource materials for both teachers and students which are available at cost.

The program was designed to prepare high school students to fulfill the legal and political responsibilities, now assumed at the age of eighteen, which include voting, eligibility for political office, and entering into legal contracts. The need for the program was established

*Approved for national dissemination

through a survey of a randomly selected group of six hundred New Jersey high school students which revealed that 81% of the students did not know how to register to vote or how to use a voting machine; 67% did not know how their local governing body functioned; 45% did not know how a piece of legislation became state law; and 79% had never met elected officials of any level of government.

Validated in 1974, the Institute's program was approved by the Dissemination Review Panel of the U.S. Office of Education for national dissemination. The program is currently in operation in 32 states in addition to the 27 high schools in New Jersey.

ESSENTIAL ELEMENTS OF THE PROGRAM

The program's replication is defined by the use of the curriculum as specified below and by participation in at least three annual workshops and the three-day Model Congress. Districts from states other than New Jersey that wish to adopt the program are urged to work cooperatively to provide the workshops and the Model Congress in their region.

CURRICULUM

The curriculum should be implemented in one or more of the following three units, each to comprise the number of components specified:

I Voter Education
(5 out of 7)

1. Voter Registration
2. Canvassing
3. Campaigning
4. Simulated Election
5. Issue analysis center
6. Election information center
7. Campaign registration center

II State Government
(5 out of 8)

1. Local government study
2. County government study
3. State government study
4. Lobbying
5. Social research
6. Community project
7. Simulations
8. Model Congress

III Individual Rights: Freedom of Expression – Fair Trial vs. Free Press
(5 out of 6)

1. Foundations of law
2. Fair trial vs. free press
3. Free speech
4. Case studies
5. Moot courts
6. Simulations

These units may be adopted and/or adapted in any of the following combinations: I; I and II; I and III; II and III; I, II, and III.

Each unit includes class work, participation in seminars, volunteer activity in the community, and inclusion of resource persons from the community in classroom activities.

ANNUAL WORKSHOPS AND MODEL CONGRESS

The following activities are scheduled in 1976-77 for the students and teachers of New Jersey districts that are part of the Institute's program.

Workshops:	Campaigns and Canvassing	October
	State Government	January
	Individual Rights (teachers)	December
	Individual Rights (students)	March

Model Congress, April 29-May 1

GOALS, EVALUATION DESIGN, AND RESULTS

Goal #1

After following the Institute's course of study, participating students will score significantly higher on the staff-developed Test of Political Knowledge than they did before entering the program.

The Test of Political Knowledge was administered on a pre- and post basis to a representative sample of students participating in the program and control group students following a traditional social studies program. Test scores were analyzed by a two-tailed T-test which showed that the students in the experimental group scored significantly higher on the post-test than did those in the control group. Thus Goal #1 was achieved.

Goal #2

After following the Institute's course of study, participating students will demonstrate a significant positive shift in attitude toward participating in the political and governmental process as measured by the staff developed Inclination to Participate Test.

The test was administered on a pre- and post-test basis to a representative sample of students participating in the program and control group students following a traditional social studies program. The test data were anlayzed by the Wilcoxon T-test which showed that the experimental group scored significantly better on the post-test than did those in the control group. Thus Goal #2 was met.

COSTS

The cost of replicating the program is basically that of staff training, participation in the annual IPLE Workshops and Model Congress, follow-up supervision, materials, and evaluation. The materials developed by the Institute staff are available at cost. Participating districts must provide for the continued assistance, encouragement, and support of staff. After the initial "start-up" investment for staff training and materials, the program's maintenance should not require an increase in a district's current operating expenses.

DISSEMINATION SERVICES AND MATERIALS

The Institute for Political and Legal Education has been funded through ESEA, Title IV-C to provide dissemination services and materials for teachers and students who wish to participate in its programs. General information about the Institute is available upon request and on-site visitations to classrooms of participating teachers may be arranged. Members of the Institute staff are available to visit school districts to explain the program. A film strip, describing the project, *Turning Students on to Active Citizenship,* may be borrowed or purchased.

A five day training program with follow-up consultations is available to the staffs of districts that sign a commitment to use the program. The training takes place at a college, in the consumer district, at an Educational Improvement Center, or another site agreeable to all parties.

This training program is also available to districts in states other than New Jersey provided that all travel, lodging and meal expenses plus consultant fees are assumed by the districts being trained and/or a state agency.

There is no charge for the services of the project staff. Consumer districts are responsible for costs incurred by their staffs for training and program installation. The following materials were prepared by the IPLE staff and may be purchased at cost. Checks or purchase orders should be made payable to the Institute for Political and Legal Education and accompany an order.

PROJECT MATERIALS

Curriculum guides:	
Voter Education	$7.50
Government: The Decision Making Process	10.00
Fair Trial vs. Free Press	2.75
Individual Rights	3.50
Booklets:	
Voter Education Lesson Plans	1.50
Voter Registration and Canvassing	1.50
Hello, Are You Registered?	.50
High School Voter Registration	1.50
Understanding Party Structure	.75
Political Education Assembly	.50
Electoral College	.50
Student Simulated Elections	.75
Election Information Center/Issue Analysis Center	.75
Political Campaign Techniques	.75
Subtle Bias of the Media	.75
Community Research Techniques — How and Why	1.75
A Guide to Lobbying	1.00
Lobbying Game: A Simulation	1.00
What You Need to Know About County and State Government	.50

County Government Curriculum Guide	.75	**Filmstrip-tapes:**	
Local Government Curriculum Guide	.75	**"First Step to Voting – Voter Registration"**	6.00
Model Congress	1.75	**"How to Use a Voting Machine"**	6.00
Individual Rights (students)	1.00	**"The New Age of Majority"**	6.00
Fair Trial vs. Free Press (students)	.75	**"Turning Students on to Active Citizenship"**	6.00

Inquiries about the dissemination services and materials available from the Institute staff should be addressed to the director.

CONTACT PERSON

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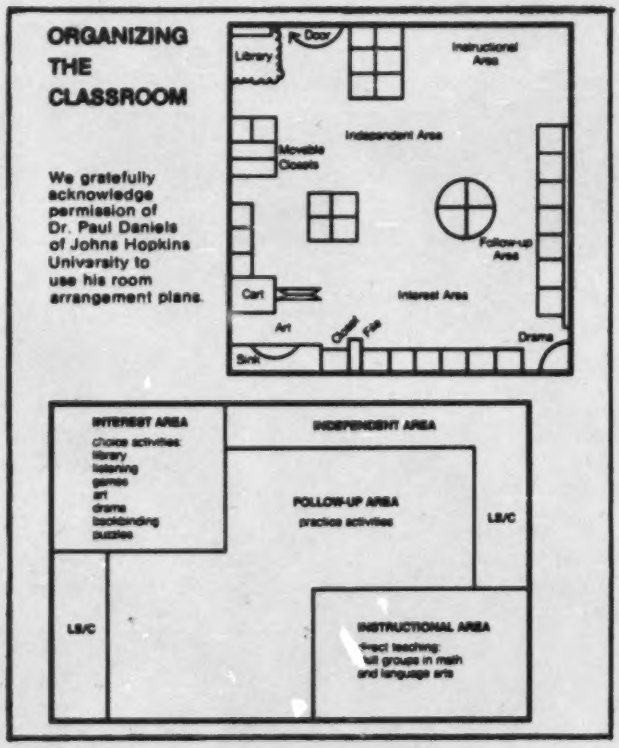
Interning for Learning

Cape May County, New Jersey

OVERVIEW

Interning for Learning was developed through the County Superintendent's Office in Cape May County to meet needs shared by the county's school districts. These needs were identified in a self-study conducted in 1969-70 as: 1) improving students' attitudes toward school and, 2) training teachers in a classroom management procedure that would permit them to individualize instruction. The program not only addresses these needs but also provides a turn-key training system that is the basis for its projected long-term impact on individual schools.

Participating teachers learn a program of classroom management which guides them in grouping students according to educational needs, and in organizing classroom activities to provide small group and individualized instruction. This management procedure, adapted to any curriculum, is most frequently used in a self-contained classroom. Teachers place students in three or four small, homogeneous groups for instruction in basic skills. Correspondingly, students' work is organized into four types of activities: direct teaching, follow-up activities, learning stations or centers, and independent activities of which there is often a choice. Each student takes part daily in each type of activity. As the teacher instructs one group at a time in the "direct teaching" activity, the three other groups rotate among the remaining activities. This format requires a two hour block of time. The remainder of the day is scheduled as the teacher judges most appropriate.



Teachers learn to diagnose student needs, prescribe lessons to meet these needs, evaluate student progress, and design and construct learning stations and centers as the primary modes of individualizing instruction. They also study new teaching materials and methods, including the use of several kinds of media. To provide the optimum atmosphere for this kind of instruction, teachers devise new classroom arrangements to accommodate four simultaneous learning activities.

The chief training vehicle for the program's dissemination both in Cape May County and statewide has been the internship of trainees in the classrooms of teachers experienced and successful in the program. The internship period is usually four days, during which time the trainee first observes the program and then assists the project teacher in each of the program's essential activities. After having mastered the new procedures and gained experience in their use, trainees are ready to provide internship opportunities for other teachers in their classrooms.

A six week summer workshop is conducted at the project site in Rio Grande, N.J., where teachers and administrators learn the essential elements of Interning for Learning and make stations, educational games and independent activities for use in classrooms. Information on this can be secured from the project director.

The project headquarters is a resource center where teachers may see sample learning stations and centers, consult on individualizing instruction, and work on materials for their own classrooms. The project staff recommends that individual schools provide similar resource centers for their teachers.

The development of the Interning for Learning program was funded through ESEA, Title III from 1971 through 1974. Validated in 1973, its continuation in Cape May County was funded jointly by local Boards of Education and the Cape May County Superintendent's Office.

ESSENTIAL ELEMENTS OF THE PROGRAM

The program's replication in another site is defined by 1) teachers' use of the classroom management program described in the project's materials, 2) establishment by school or district of a turn-key training program based upon an internship experience, and 3) if feasible, the establishment of a resource center on a school, district, or county wide basis.

GOAL, EVALUATION DESIGN, AND RESULTS

Goal

Students of participating teachers will have a better attitude toward school than students of non-participating teachers.

The IOX School Sentiment Index (SSI) was used for twelve randomly selected classrooms from nine schools, in May, 1973. A comparison of the six project classrooms with the six control classrooms using the Wilcoxon T test showed significant differences in favor of the project classrooms.

COSTS

The cost of replicating the program is primarily that of staff training, follow-up supervision, and evaluation. Provision should be made for the continuing support and encouragement of staff including ongoing internship training within an adopting district. The costs of a resource center are primarily those of materials and the staff assistance offered to teachers.

DISSEMINATION MATERIALS AND SERVICES

The project has been funded by ESEA, Title III as a demonstration site to offer complete training services and materials to interested educators. Visitors are welcome. A brochure which gives an overview of the program is available free of charge. The following materials, prepared by the project staff, may be purchased at cost. Checks or purchase orders should be made payable to Interning for Learning and accompany the order.

Challenge for Change $2.00

An explanation of the management system for teachers. (57 pages)

Learning Centers and Stations $2.50

Descriptions of centers and stations made by teachers in the program. (125 pages)

Bicentennial Stations, Centers and Activities For Creative Learning $2.50

Teacher made stations etc., all with a bicentennial theme. (137 pages)

Resource Manual for Coordinators $4.00

Administrative and training responsibilities for the maintenance and expansion of the program. (83 pages)

Introductory filmstrip-tape $5.00

The project staff offers five days of internship training plus follow-up consultation to the staffs of districts that sign a commitment to replicate the program. Training covers classroom management, construction of learning centers and stations, organization of a resource center, and structure of the internship program. The services of the project staff are free of charge. Consumer districts are responsible for costs incurred by their staffs for training and the installation of the program.

Inquiries about the project and its dissemination plan should be addressed to the project coordinator.

CONTACT PERSONS

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Junior High School Program To Increase Humanistic Instruction and to Decrease Dropout Proneness Among Underachievers

Woodbridge, N.J.

OVERVIEW

In a previous program, Project MOPPET[1] (Media Oriented Program Promoting Exploration in Teaching), the project staff designed a humanities approach enabling the regular classroom teacher to integrate a comprehensive program of poetry, creative drama, music, art, dance or movement, and filmmaking with the regular elementary curriculum. This program extends and adapts to the junior high school level the basic process that was developed in MOPPET. Funded by a 3-year ESEA Title III grant, 1973-76, the project staff worked with junior high teachers (grades 7-9) to develop lessons that integrated the communications avenues of the arts with units of English, Social Studies, Science, Math, etc. These lessons were designed to culminate in creative arts experiences in which each student is able to express his or her individual impressions and ideas.

The district's educational needs which led to this program were (1) to provide humanistic experiences through which all students could express themselves through the various modes of the arts, and (2) to provide for experiences through which underachievers and the dropout prone could express themselves successfully. It was hypothesized that such successful experience is essential to enable underachievers to change their own self image, and that such a change in attitude is the essential precondition for school adjustment.

The project staff also created a physical setting for teaching the humanities, a carpeted room larger than the regular classroom, empty of furniture or large enough that the furniture can be cleared away, with a large curved screen at one end to accommodate as many as three simultaneous media projections. Within this framework the staff uses several types of audiovisual equipment, including slide, overhead, silent loop, and both silent and sound movie projectors, cassette recorders, and record players.

A similar setting may be created in a classroom, all-purpose room, library or any other large room, substituting for the large curved screen three individual screens, a very large white sheet of paper taped to the wall, or an uncluttered light colored wall surface.

As teachers become familiar with the project prototype lessons, the media techniques and with the process around which the lessons are organized, they are encouraged to design their own lessons integrating the new techniques with their own curriculum. Lessons may use commercial, teacher-made or student-made materials.

[1] A description of Project MOPPET can be found on page 67.

ESSENTIAL ELEMENTS OF THE PROGRAM

The program's replication in another site is defined by the use of MOPPET type lessons in four or more of the arts on a regular basis by classroom teachers. The project staff recommends that lessons be taught in a room with adequate space for students to move about.

GOALS, EVALUATION DESIGN, AND RESULTS

The objective of the program is to demonstrate that significant traits and attitudes exhibited by underachieving students on standardized tests, with consequent negative effect on school retention, can be overcome by use of the MOPPET intervention process; that upon the completion of two years of experience with the process, the traits and attitudes of alienation can be reduced or eliminated so that students' functioning can be equated as normal.

First year:

Two bottom track 7th grade classes were used, with eight bottom track classes from other junior highs used as controls. Pre and posttests were given using the Demos-D Dropout Scale (DDS) and the Adolescent Alienation Index (AAI).

Results of the pre-tests indicated that the experimental class was significantly below the control group in school alienation and dropout proneness. After 100 project intervention experiences the posttests revealed that the two groups were equalized.

Second year:

Nearly half of the two original control classes were mainstreamed in the eighth grade. The remainder formed an experimental class. The controls were a matched group from another junior high, matching based upon their weighted scores on the School Interest Inventory (SII) which was administered at the end of the previous year. After 67 project intervention experiences, the results of the posttests indicated that: as a result of two years in the program, alienation as measured by the AAI and dropout proneness as measured by the DDS were significantly less for the experimental group when compared to their peers.

Third year:

All of the original experimental group was mainstreamed in the ninth grade. Using the previous year's posttest results as baseline data, the three previously used instruments, AAI, DDS, and SII, were again used as posttests with the experimental students. Two randomly selected regular classes were used as controls.

The experimental children received no special intervention in the ninth grade. The results of posttests revealed that the mainstreamed experimental students were no more alienated or dropout prone than the sampling of regular students. Classes containing the mainstreamed experimental children were observed by a trained psychologist who confirmed that the experimental children were in fact functioning as well as regular students.

It can thus be concluded that the MOPPET program for junior high school students significantly reduces drop-out proneness and improves their attitude toward school.

COSTS

The cost of introducing this program into a district is estimated in terms of intervention units: 330 students, one renovated special facility, 3 classroom teachers and 3 arts teachers. The first year costs are estimated at $7,240 distributed as follows: one-time start up costs for remodeling, equipment, supplies and in-service instruction – $3,970; administration costs – $400; and operational costs for continuing in-service materials and equipment – $2,870.

Detailed cost specifications for all major elements of the program are included in the project's dissemination materials.

DISSEMINATION MATERIALS AND SERVICES

Validated in October, 1976 the project is now funded by ESEA Title IV-C as a demonstration site where visitors may see the program in action, examine its materials, and receive training and follow-up consultation in its replication. A brochure containing an overview of the program is available free of charge from the project director. A descriptive 16mm sound film may be borrowed. The project's materials are available at cost. Checks or purchase orders should be made out to the Woodbridge Board of Education and accompany an order for materials.

MOPPET (Media Oriented Program Promoting Exploration in Teaching):

MOPPET Teachers Manual, Gr. 7 (370 pages)	$8.00
MOPPET Teachers Manual, Gr. 8 (216 pages)	5.00
MOPPET Teachers Manual, Gr. 9 (143 pages)	5.00
MOPPET: Theory & Practice (In depth study of lesson process, 256 pages)	7.00
MOPPET: How To Do It (A replication manual 90 pages)	2.50

During the spring of 1977 the project staff will conduct in Woodbridge a series of training workshops open to all interested parties whose districts have made a commitment to implement the program. Limited follow-up consultation is also available from the project staff.

There is no charge for the training and consultation services. Consumer districts are responsible for the replication costs. Inquiries about dissemination services and materials should be made to the project director.

CONTACT PERSON

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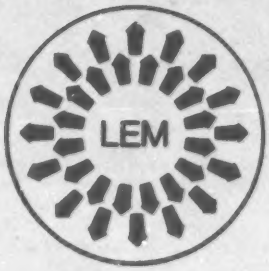
* LEM: Learning Experience Module

Hackensack, New Jersey



OVERVIEW

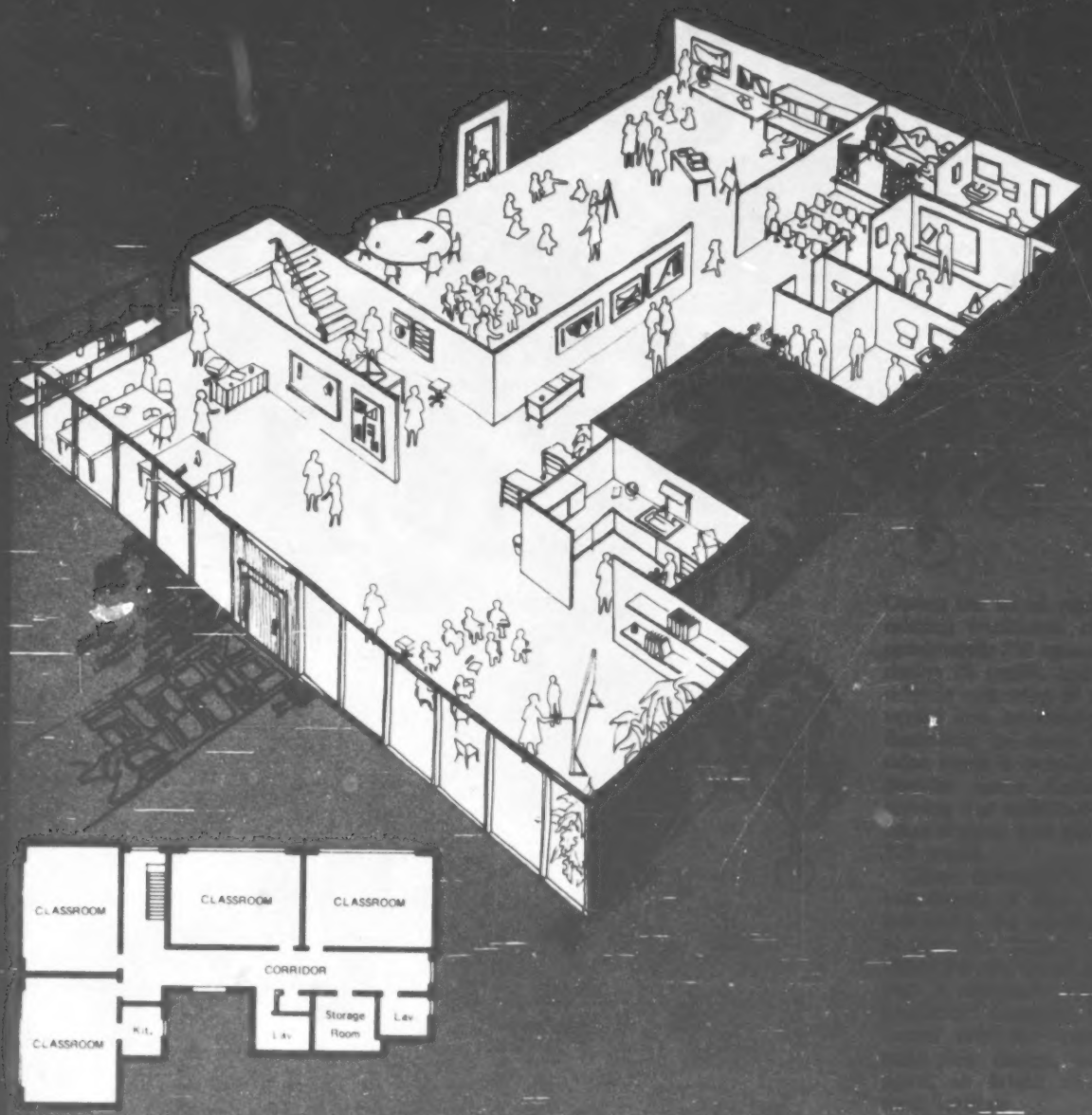
Project LEM is an educational management design for organizing and structuring an open-space school. The need for its development grew out of the Hackensack school district's commitment to provide an educational program and learning environment that will enable each child to achieve self realization and social competence.

Hackensack is an urban center whose population is 5% non-English speaking, 37% Black, and 58% White. The students in Hillers Elementary School, the project site, are a cross section of the community. Those who took part in the project were randomly selected with the exception that all non-English speaking students were included. The program was developed through ESEA, Title III funding between 1970 and 1973.

The project staff drew up plans to renovate portions of the school to accommodate more students, and developed an educational program for the open space provided by the renovation. The educational program includes techniques to group students in order to foster their intellectual and social growth, a team organization for teachers, and a mode of scheduling that permits teachers to give more individualized instruction and specialize in some subjects. During three development years, the staff organized three LEM's or open plan centers to accommodate a total of 350 students. All renovation costs were provided from local funds.

The remodeling for each LEM was slightly different, but, the goal for each was to create more useable space for many modes of instruction. Each LEM has the standard teacher-pupil ratio, yet the scheduling and grouping techniques permit variation in instruction. For

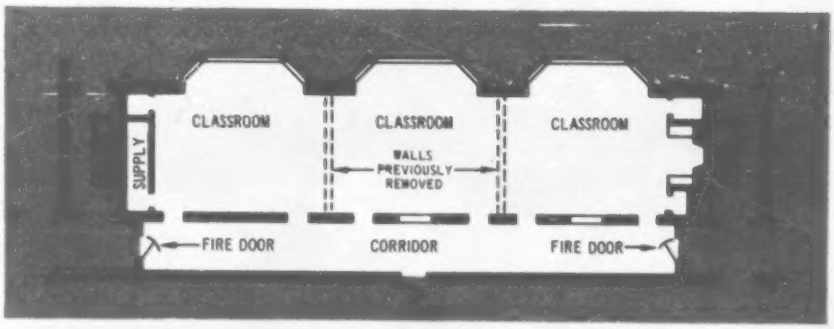
*Approved for national dissemination



LEM II

The establishment of this learning center was accomplished by combining a corridor with an already existing open-classroom area adjacent to it. The space previously accommodated 75 youngsters. After the change, it was able to meet the needs of 100 — *a 33 1/3% increase!*

No walls had to be removed, but a fire door had to be built at each end of the corridor. An acoustical ceiling and side-wall lighting were installed in the corridor section. Doors leading from the large room into the corridor were removed and the entire area carpeted. A living room center was planned and completed with an existing fireplace as its center. A kitchen/staff-workroom was achieved through the use of a storeroom adjacent to the corridor.



a group of 100 LEM students, there is a staff of four: team leader and three other teachers. An aide is shared with other LEM units. The LEM's of 125 students have an additional teacher. Each LEM spans two grade levels: 2nd and 3rd; or 4th and 5th. Each teacher instructs one group of students daily in each of the basic skills: reading, language arts, and mathematics, and also prepares and teaches lessons for several groups of students in one of the following areas: social studies, science, or cultural arts. For these subjects, students rotate studying a different subject each day. This schedule not only permits teachers to work closely with a small number of students over a two-year period in basic skills but also provides them the time to develop and teach one other subject in depth.

Students with similar needs are grouped for reading, language arts, and mathematics. Students change to heterogeneous groups for social studies, science, cultural arts, music, physical education and art. The groups are changed as the students' social and intellectual needs change. To this basic structure, the instructional team often adds group and individualized instruction to provide variety and answer special needs. This grouping fosters the students' continual growth in basic skills, as well as their social development.

Validated in 1973, Project LEM was approved by the Dissemination Review Panel of the United States Office of Education for national dissemination. It is now implemented in 5 schools in New Jersey and six in other states (California, Massachusetts, Ohio and South Carolina). Adopters include rural, urban and suburban districts.

ESSENTIAL ELEMENTS OF THE PROGRAM

The program's replication in another site is defined by 1) non-graded instructional approach, 2) use of teacher teams with a differentiated staffing pattern, 3) multi-age grouping, 4) diagnostic-prescriptive teaching, 5) diversified instructional program, 6) parent and community involvement, 7) efficient space utilization.

GOALS, EVALUATION DESIGN, AND RESULTS

Goal #1

Children in the LEM program who scored *below* the fortieth percentile in any section of the California Achievement Test battery, 1970 edition, will improve by at least 50% during the school year.

The CAT battery was administered to the LEM group (grades 3, 4, and 5) pre in 11/71 and post in 6/72. Gains were compared with the criterion for each group. Average gains were well above the criterion of a 50% gain over initial percentile ranking for children scoring below the fortieth percentile on any section of the CAT.

Goal #2

Children in LEM who score at or *above* the fortieth percentile will maintain or improve their percentile ranking over a one-year program period.

The data were drawn from the two administrations of the CAT as in Goal #1. Comparisons examined average rates of gain at all four grade levels. The data show that students at or above the fortieth percentile on the CAT continued to gain academically at a normal rate of approximately one grade level per year.

COSTS

The cost of replicating the essential elements of the program is basically that of staff training. Provision must be made for continuing staff supervision and support.

Renovation costs vary with the requirements of the specific site, and may be justified if greater numbers of students can be thereby accommodated, thus saving the greater costs of rented facilities or new buildings.

SCHEDULING

A major feature of LEM is the structure employed in both scheduling and grouping procedures. In LEM, the "exploring" of new interests and challenges is encouraged in a non-threatening and supportive manner.

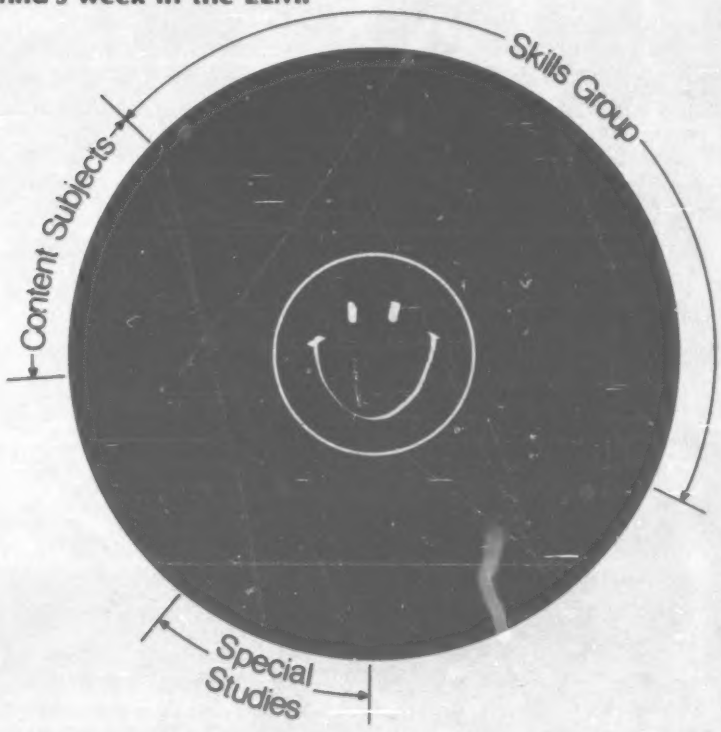
The intent is to design the schedule so that each child, each day, gets to participate in each of the basic academic areas — reading, language arts, and math. In each of these basic skills areas, all groups are conducted at the same time. The content area subjects — social studies, science, and cultural arts — are scheduled simultaneously, but the children rotate, participating in a different subject area each day.

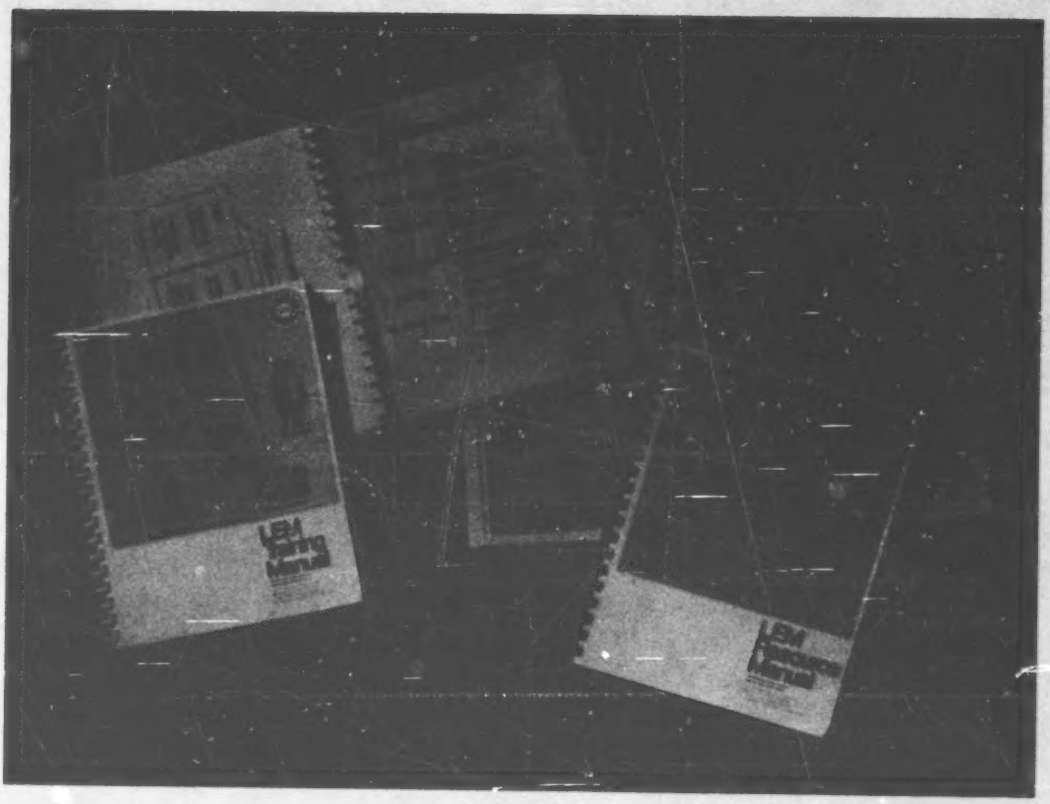
The Foreign Language in the Elementary School (FLES) program provides 15 minutes of aural-oral instruction in Spanish every day for each child in grades 3-5.

Art, music, and physical education are scheduled concurrently and groups are formed based on home base groupings. Scheduling these subjects simultaneously attempts to provide planning time for the LEM teams within the school day.

One member of the staff, comparing the LEM to her earlier experience in an experimental program in another city, commented: "The LEM's more organized. The equipment's more centrally located. But the biggest difference is that there's so much more group planning and, as a result, the children are enjoying success."

Typical scheduling pattern of a fourth and fifth grade child's week in the LEM.





DISSEMINATION SERVICES AND MATERIALS

Project LEM is funded as a demonstration site by ESEA, Title IV-C to offer interested educators the opportunity to see the program in action at the Hillers Elementary School, examine its materials, and receive training and follow-up consultation in its replication. Members of the LEM staff are available to give orientation presentations to the staffs of interested districts.

A one week training program with follow-up consultation is available to the staffs of districts that make a commitment to replicate the program. During the academic year, training is available at the adopter district, an Educational Improvement Center, or a mutually agreeable site. Summer training may be conducted at the Hillers Elementary School. Training services of the project staff are free of charge, but consumer districts are responsible for the costs of installing the program in their schools.

The project staff has prepared the following materials available free or at cost. Orders for materials should be accompanied by purchase order or check made out to the Hackensack Board of Education.

Overview and Evaluation (8 page booklet)	Single copy free Multiple copies @ $.35 each
Environment and Space Utilization (8 page booklet)	Single copy free Multiple copies @ $.35 each
Organization and Curriculum (8 page booklet)	Single copy free Multiple copies @ $.35 each
Home-School Interaction (8 page booklet)	Single copy free Multiple copies @ $.35 each
LEM Resource Manual (141 page manual for teachers)	$6.50 per copy
LEM Training Manual (206 page presentation of the training program including masters for overhead transparencies and handouts)	$6.50 per copy
Filmstrip/tape Overview of Project LEM	$10.50, may be borrowed
Filmstrip/tape Organization and Curriculum of Project LEM	$15.50, may be borrowed

Inquiries about dissemination services and materials available from Project LEM should be addressed to the project director.

CONTACT PERSON

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Director of Elementary Education
Maple Hill School
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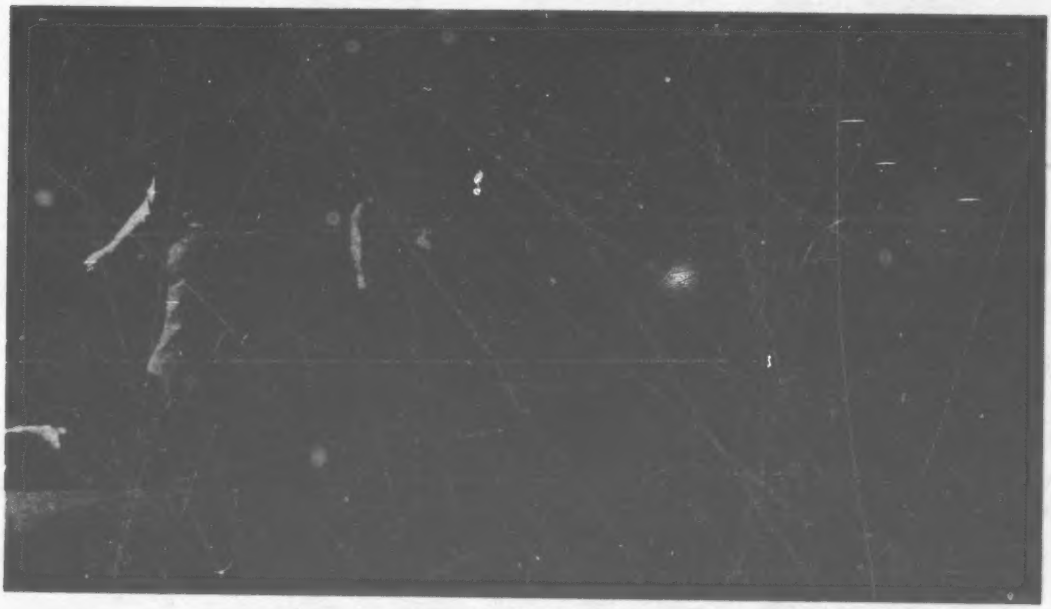
Project MOPPET: Media Oriented Program Promoting Exploration in Teaching

Woodbridge, New Jersey

OVERVIEW

MOPPET is a humanities curriculum (grades K-6) which enables the *regular* classroom teachers to introduce a comprehensive humanities program of poetry, creative drama, music, art, dance or movement, and filmmaking into the elementary school curriculum. The MOPPET lessons may be taught as separate entities, or integrated into the academic curriculum, or both. Developed by artists on the MOPPET staff and piloted in experimental classes, these lessons have now become part of the elementary school curriculum in Woodbridge.

The district's educational needs which led to this program were (1) to provide modes of expression and success experiences for students who were low achievers and often nonverbal and (2) to permit all students to express themselves in the arts. The MOPPET staff hypothesized that if these needs were met, students' language arts skills, including reading, would be improved. The program's development was funded through ESEA, Title III from 1970 to 1973. Validated in 1973, the MOPPET lessons are now used in over 25 districts in New Jersey and other states.



Each Moppet lesson states the objectives, the required materials, and recommended procedures. The program encourages teachers to write lessons for other curriculum areas. Lessons begin with the setting of a mood or creation of a new environment. To do this, teachers use movies, slides, overhead transparencies, music, poetry reading, story telling or the movement of students around the room. Students talk about what they have seen or done and the way the experience makes them feel. Next, students carry out a project, individually or in groups, in which they express their feelings and thoughts about the subject at hand. Students may write poetry; create a painting, drawing or sculpture; improvise in music or dramatic scenes; produce films; or express emotion and thought through movement. ***Whatever the medium, the hallmark of the lessons is that the students are the artists.*** They create works of art once they have learned the techniques, and are given the freedom to express themselves.

In addition to writing the lessons, the MOPPET staff has created an optional physical setting for teaching the humanities. The "MOPPET" room is slightly larger than a regular classroom, carpeted, empty of furniture, and, at one end, has a curved screen large enough for three simultaneous projections. Here, the staff uses several types of equipment, including projectors, tape recorders, record players, cameras and rhythm instruments.

A similar setting may be created in a classroom, all-purpose room, library or any available large room, substituting for the large curved screen three individual screens, a large sheet of white paper taped to the wall, or an uncluttered wall surface, with all furniture pushed aside.

As teachers become familiar with the MOPPET lessons, they begin to design their own and experiment with various media and combinations of media. The materials for the lessons can be largely student and/or teacher-made. Teachers' development of judgment, taste, and style in these matters will open up new curriculum possibilities.

In Woodbridge, the resource materials required for the MOPPET lessons are available in kits keyed to each lesson, and can be borrowed from the Central Instructional Materials Center.

ESSENTIAL COMPONENTS OF THE PROGRAM

The program's replication in another site is defined by 1) implementation of the MOPPET teaching process, (i.e., input, interaction, and experience), and 2) use of a minimum of twenty-four lessons per year in a broad spectrum of the arts: art, drama, music, poetry, movement, and filmmaking (a minimum of four of these areas).

GOALS, EVALUATION DESIGN, AND RESULTS

Goal #1

Students in MOPPET will gain in creative thinking ability.

The first year, a posttest-only control group design was used with two treatment groups and one control class, as follows:

Group A-1 average first grade class received 39 MOPPET lessons.
Group B-1 lower socio-economic first grade received 13 MOPPET lessons.
Group C-(control) 1 first grade, no MOPPET lessons.

Matched groups (A and C) were posttested on the verbal test part of the Torrance Test of Creative Thinking (TTCT) in April, 1971. The results show the MOPPET group clearly ahead on all three scales in the first year of the program.

The second year, a new MOPPET class of second graders was compared with a new control group. Both the verbal and figural sub-tests of the Torrance Test (TTCT) were used for pre (Dec. 1971) and posttest (March, 1972). Although controls were higher on one pretest, and comparable on the other, the MOPPET pupils outscored the controls on both posttests. Both first and second year results achieved Goal I.

Goal #2

MOPPET pupils will increase their knowledge of basic space, time and quantity concepts which are essential to academic achievement.

In April, 1971 all three groups (A, B, C) were given a posttest using the Boehm Concept Mastery Test (BCMT). This test consists of 50 items concerning the child's understanding of space, time and quantity. MOPPET group A scored significantly higher than either group B, which had only one third as many MOPPET lessons or the control groups. Goal #2 was achieved.

Goal #3

Students in MOPPET will gain in cognitive ability.

In April, 1971, students were given The Cognitive Abilities Test (CAT), a revised version of the primary levels of the Lorge-Thorndike Intelligence Tests. The main MOPPET Group

(A) outscored both the limited MOPPET Group (B) and the Controls. The A-B difference was significant. Project MOPPET achieved Goal #3 when applied over a full school year.

COSTS

The cost of replicating this program is for the MOPPET manuals, the equipment required for their use, and staff training. The MOPPET manuals cost under $20. The lessons call for the use of equipment and materials already found in most districts such as: Projection screens (3), Slide projectors (3), Film projector, 16mm, Overhead projectors (3), Cassette tape recorders (3), Record players (3).

Costs and specifications for additional materials and equipment, including plans for building a curved screen, are given in the project's dissemination materials.

Staff training costs depend upon the skills and background of the interested staff. It must be emphasized that the lessons are designed to be used by the *regular classroom teacher.* Careful study of the lessons and the replication manual should supply the basic information required to begin using the lessons.

In the first year of the MOPPET program, the originating district received no outside funding. The lessons were taught largely with materials already available with an additional expenditure of about $200. This point is made to show that almost any school or district can afford to begin to use the lessons.

DISSEMINATION MATERIALS AND SERVICES

Project MOPPET is funded by ESEA, Title IV-C as a demonstration site where visitors may see the program in action, examine its materials, and receive training and follow-up consultation in its replication. A brochure which gives an overview of the program is available free of charge from the project director. A descriptive film-strip/tape and 16mm films, "The Best You" and "Shh . . . Listen . . . To Yourself" may be borrowed. Sample kits to accompany some elementary and junior high school MOPPET lessons are also available on loan. The project's printed materials are available at cost. Checks or purchase orders should be made out to the Woodbridge Board of Education and accompany each order.

MOPPET Teachers Manual, Gr. K-3 (242 pages)	$5.00
MOPPET Teachers Manual, Gr. 4-6 (262 pages)	5.00
MOPPET: Theory & Practice (256 pages) Indepth study of the MOPPET process	7.00
MOPPET: How To Do It; A Replication Manual (90 pages)	2.50

During 1976-77, the MOPPET staff will conduct at Woodbridge training workshops in teaching all categories of the MOPPET lessons for educators whose districts have made a commitment to implement the program. Training and follow-up consultation services of the MOPPET staff are free of charge. Consumer districts are responsible for the costs of replicating MOPPET in another site. Inquiries about dissemination services and materials should be addressed to the project director.

CONTACT PERSON

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Multi-Resource Mathematics Management System

Glen Ridge, New Jersey

OVERVIEW

The Multi-Resource Mathematics Management System (MRMMS) is an educational program designed to meet the individual needs of students in mathematics on a K-4 basis. Originally developed by teachers and administrators at the Linden Avenue School in Glen Ridge in 1973-74, it was expanded and field tested the following year at the Central School, and is now operative in all three primary schools in the district. The system is housed in a large classroom designated as the "Math Center," wherein the teacher can simultaneously teach many students on an individual level by prescribing activities or assignments to meet each child's needs. Each pupil spends five periods of 50 minutes per week in the Math Center.

The program comprises two basic components:

1. As the core of the program, a set of 527 instructional objectives to which are keyed, as prescriptions, materials and resources from a variety of publishers. Any type of mathematical learning materials may be adapted for use in the center. The learning objectives are divided into 10 strands covering all facets of mathematics, and further classified into three subsystems corresponding to grade levels 1-2, 3-4, and 5-6.

2. A system for managing math instruction for the above objectives, which cycles the pupil through the following steps:

   Diagnosis – The teacher analyzes the child's weaknesses by diagnostic "check-in" tests.

   Prescription – The teacher prescribes appropriate materials from the list of pupil assignments catalogued in the collection of materials, to help the child in a specific objective. Pupil works individually on these materials.

   Post-assessment – The child takes a "check-out" test when he feels he has mastered the objective. If he completes the test successfully, he progresses to another objective; if not, the teacher either prescribes additional work in that objective or moves him to another objective, returning him to the deficient skill at a later time.

The MRMMS is a highly flexible program adaptable to many diverse classroom structures and resources. It also requires a brief training period for either teachers or students.

ESSENTIAL ELEMENTS OF THE PROGRAM

The program's replication in another site is defined by 1) a set of learning objectives covering mathematics skills, 2) a set of "check-in" or pretests and "check-out" or posttests designed to measure a student's knowledge of the objectives and 3) various educational materials coded in to the objectives.

GOALS, EVALUATION DESIGN, AND RESULTS

Goal #1

To improve learning by concentrating on the individual needs of students.

Pupil achievement was tested with two pilot groups of similar intelligence. Twenty-five (25) third and fourth grade pupils were taught mathematics with the experimental MRMMS program while an identical control group was taught with a textbook based program. Pre- and posttesting with the Stanford Achievement Test revealed that, while both groups were similar in achievement prior to program usage, a statistically significant difference occurred in achievement favoring the MRMMS group after only three and one-half months of instruction.

Since the initial testing, achievement has been monitored with the California Achievement Test-Mathematics, administered in October 1975 to third grade students who had been in the program for one year. The results showed achievement above the predicted level for students of Glen Ridge's socio-economic status in all three areas of testing: computation, concepts and problems, and total mathematics.

Goal #2

To intensify learning by increasing pupil attention to the learning task and by making learning more meaningful to the student.

Observations of pupils utilizing the MRMMS showed that such pupils spent a greater percentage of their time paying attention to the tasks assigned to them.

Children were given several attitude surveys to determine their feelings about using the system, and were asked what they liked or disliked about the Multi-Resource Mathematics Management system. The overwhelming response was positive. Students particularly enjoyed the increased independence and individual work inherent in the system.

COSTS

The initial cost to an adopting district relates to staff training and the purchase of 1) a catalog of Resources ($320) and 2) Pre- and Posttests ($1344 and $500) published by Random House. Materials developed by the producer district are available at cost and include: a training manual, record-keeping forms, placement test, and review units.

DISSEMINATION MATERIALS AND SERVICES

Validated in 1975, the program is funded by ESEA, Title IV-C, as a demonstration site. Visitors are welcome. A brochure giving an overview of the program is available free of charge. The following materials developed by the project staff may be purchased at cost:

Training Manual	$5.00
Placement Test	5.00
Review Units	9.00 (all 10 strands)
Record Keeping Forms	.50 each (3)
Prescription Updates and Textbook Codings	5.00
Filmstrip	5.00

The project staff offers training free of charge which includes: classroom management, record-keeping, physical set-up and arrangement of a Center, modification of materials. Follow-up consultations are also provided. Consumer districts are responsible for costs incurred by their staff for trainingand installation of the program.

Inquiries about the project and dissemination materials and services should be addressed to the project director or project coordinator.

CONTACT PERSONS

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Project Coordinator
Linden Avenue School
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MULTI-UNIT High School

Annandale, New Jersey

OVERVIEW

The Multi-Unit High School (MUHS) combines an instructional strategy, organizational structure, and staff development process into a model that helps schools meet student perceived needs, assessed needs, career requirements, and human development needs. Successful implementation of the model produces a school environment more open, trusting, cohesive, and positive for staff and students alike via *Learning Communities* (LCs) and a *multi-elective structure.*

"Learning Communities" – a new concept in secondary education – offer the student an alternative personal approach to securing an education in the basic areas of English, Social Studies, Math and Science.

Complementing the Learning Communities, and an integral part of the total project, is the multi-elective structure which attempts to address the human needs of students as well as their learning needs. Schools in the past have often stressed knowledge accumulation at the expense of human needs, whereas alternative schools have often stressed the human needs at the expense of knowledge. Some students do well in a school where the curriculum is developed around the subjects, while others need a curriculum centered on the student. The program provides for both types of students by giving them a "supermarket" of resources where students with the help of teachers, counselors and parents can select those resources or combinations of resources that will maximize their learning.

Funded by an ESEA Title III grant over a 3-year period, 1972-75, the multi-unit high school concept was developed at North Hunterdon High School by teachers, curriculum leaders, and administrators who researched, studied, visited schools throughout the United

States, and various Individually Guided Education high school programs in Wisconsin and Ohio. The Institute for Development of Educational Activities (I.D E.A.) of the Kettering Institute provided a large portion of the operational processes necessary for the Learning Community concept of the project.

From the synthesized information evolved the North Hunterdon model. It differs from other programs in that it consists of Learning Communities which form the basic administrative units within the school and act as autonomous student centered mini-schools within a departmentalized school of 300 multi-elective courses. Both students and staff may reside for a given period of time in a given academic year in either one or both worlds – individual or knowledge. The current high school staffing positions are preserved and interwoven into the Learning Community (LC). The model, is therefore comprehensive in nature and inclusionary rather than exclusionary as to staff and student needs.

Basically the LC, or mini-school model, consists of a teacher team representing English, Social Science, Mathematics and Science; about 20-125 pupils; and a Guidance Counselor. Pupils spend at least 40% of the school day in LCs. Upperclassmen can enter an LC (or participate entirely in the regular elective system) where they can get specialized study which appeals directly to their interests. There are LCs for many interests, such as General Education, Performing Arts, Math-Science, Social Science, Vocational Education, and Philosophical Foundations. Upperclass LCs are both single and multi-graded.

Freshmen, who generally have a harder time adjusting to high school, are required to enter a Learning Community. They can choose from five: Humanities, Liberal Arts, Vocational-Business, Mathematics-Science, and General Education.

Within a given LC, the classrooms are next to each other, students and teachers work together and have sole decision-making power over the community's block of time. They can ignore the regular time periods and arrange their schedule to fit the needs of the LC. Decisions within the LC range from instructional decisions to budget transactions, and are reached by a consensus of the entire LC staff and, in some cases, with students participation. By keeping up to date on what is taught in each other's classes, or as an entire group, the four teachers can arrange complementing lessons and, through cooperation and shared interests, learn about other fields in their LC and work other subject areas into their own class presentations.

To insure that pupils are learning, various assessment instruments are used periodically to measure both the cognitive and affective domains as well as the learning styles of each student in the community. To an extent, depending on the LC, pupils can work at their own

pace, receiving credit for the work taken. Furthermore, the LC can develop and implement courses at will as long as they are congruent with the goals and objectives of the LC, the school, and the district.

Not only do LCs cross the lines of academic disciplines within their own structures, but they sometimes take their specialties to other LCs in the form of presentations or mini courses. Also, as a side effect, the multi-grade or nongraded LC has found that 10th graders tend to work up to the level expected of Seniors and the pupils have come to ignore age differences. Furthermore, most behavior problems are handled by the LC where the teachers and the Guidance Counselor know the pupil and his family background.

ESSENTIAL ELEMENTS OF THE PROGRAM

The project's replication by a district consists of establishing, first, the proper atmosphere fostering care for others, positivism, and action; and second, the actual model with its components. This is accomplished by a two phase training program based on Maslow's hierarchy of needs: 1) leadership training that leads to group commitment and; 2) an operational model in four parts.

The first phase consists of four stages: 1) Leadership Training, for 20 percent of the staff, that stresses open communication, trust, decision-making and positive reinforcement; 2) Individual Teacher Improvement Strategies; 3) Classroom Management Strategies; and 4) Program Management Strategies dealing with specific skills to insure the outcome of the project.

The second phase of the project consists of four parts:

1. An organizational model that allows the school to decentralize itself to its most common teaching learning unit superimposed on a multi-elective grid;
2. An advisor-advisee concept;
3. A systematic curriculum/instructional process and
4. A self-governance strategy that allows decisions to be made to the most appropriate level of impact.

EVALUATION DESIGN AND RESULTS

The overall goal was to make a large comprehensive high school more responsive to student, teacher, and community needs.

Goal #1

The *staff*, as a result of the training program, reorganized the entire Freshman Class and some interested upperclassmen into 10 Learning Communities (LCs) or mini-schools, of from 20 to 125 students each, with approximately 2-5 staff members of varied subject areas. The goal of the reorganization was to meet the *criterion referenced level* of 45% as indicated on the LC Self-Assessment Index, 55% level on the Internal Operations Instrument, and 50% level on Team Effectiveness Scale. Each LC developed and implemented the following strategies:

A. An advisor-advisee concept to meet student-perceived, assessed, career, and human development needs;
B. A systematic instructional program that involved goal definition, performance specificity, and delineation of instructional modes and styles;

C. A self-governance strategy that involved the LC in community building, self-evaluation, and active decision-making in determing budget, time, and space requirements for its students and staff.

Goal #2

After a minimum of one year's involvement, students in LCs as a whole exhibited a marked to significant increase in the following areas or scales of concern as measured by the Stern High School Characteristics Index: a. Intellectual climate; b. Student dignity; c. Self-expression; d. Cohesiveness; e. Congeniality; f. Openness.

Student intellectual achievement will remain the same or improve as measured by the Iowa Test of Educational Development; and student failure, low-passing, and cutting rates will exhibit a substantial decrease as evidenced by various unobtrusive measures.

Results: The North Hunterdon Regional High School Project evaluated their program, utilizing a variety of measures, including locally developed scales to monitor changes in attitudes and organizational behavior, the Stern High School Characteristics Index, and congitive tests such as the Iowa Test of Educational Development.

Goal 1: The first objective monitored the extent of reorganization that occurred within the school. The data strongly support the claim that the objective was attained: Over 50% of the school was reorganized into learning communities and the new structure is far on its way toward acceptance as an institutional characteristic.

Goal 2: The second objective focused on the changes that would be forthcoming in students' attitudes, as a result of implementation of the learning community concept. For this objective the main instrument was the Stern High School Charecteristics Index. The analysis of pre/post data on the Stern instrument showed a significant increase in students' attitudes in the learning communities. Other "unobtrusive" measures were utilized, including analysis of failure rates, low passing grades and class cutting rates. In each instance a significant increase occurred in the desired direction.

Lastly, cognitive growth was measured using the Iowa tests, although this was not a specific objective in the project. The data showed that North Hunterdon students improved in 18 of the possible 22 comparisons done on the Iowa examinations. This degree of accomplishment indicated that, despite the growth in the affective area, the project did not interfere with the cognitive growth.

The model thus was able to open up the school and educational process; create a variety of educational options for students; and significantly improve the school as an environment for teachers to work in. It has been accepted by students, teachers, parents and the Board of Education who have not only maintained it at N. Hunterdon H.S. but also introduced it to Voorhees H.S., the district's second school, which opened in September, 1975.

COSTS

The project depends mainly on a re-allocation of existing resources associated with the reorganization into Learning Communities. Additional costs relate to substitutes during in-

service training, stipends for Learning Community Leaders, parent and community council activities, evaluation, and materials. Adopter districts may incur additional costs if they do not have all the prerequisites such as (1) the ability to re-allocate staff and administration responsibilities to carry out the project; (2) clearly defined district goals and objectives; and (3) staff training completed during school time with substitutes provided to continue the normal ongoing school functions.

Other provisions can be made for training, e.g., during summers, vacations, etc. Training is provided free of charge, and manuals sold at cost. One time start-up cost is approximately $20.19 per student with a continuation cost of $7.64 per student per year.

DISSEMINATION SERVICES AND MATERIALS

The North Hunterdon MUHS Project has been funded through ESEA, Title IV-C to provide dissemination services and materials for administrators and staff who wish to participate in the program. General information is available upon request and on-site visitations may be arranged where project personnel can discuss general aspects of the project as well as detailed implementation plans. Training is conducted for 20 percent of adopter staff in a three-day workshop, following which local leaders, aided by one project person, will train their own district personnel in a two-day workshop. Other in-service sessions may occur as need arises.

There is no charge for the services of the project staff. Consumer districts are responsible for costs incurred by their staffs for training and program installation. The staff has prepared 10 manuals detailing all phases, from overview to training and evaluation. These may be purchased at cost – price to be determined.

Project Manual
The Superintendent's Manual
Principal's Manual
Assistant Principal's Manual
Learning Community Leader's Manual
Learning Community Staff Manual
Guidance Manual
Department Chairman Manual
Training Manual
Program Manual

Information on the program, services or material may be secured from the project director.

CONTACT PERSON

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* PERCEPTION +
(Project SEE: Specific Education of the Eye)

Union, N.J.

PERCEPTION+

OVERVIEW

Perception+ was designed to develop in children the visual skills, and the physical and mental discipline needed for meaningful learning by training them in perceptual ability -- the skills of seeing. The staff produced and field-tested instructional materials for kindergarten and first-grade which consist of a series of three-dimensional visuals, called Tactuals, one introduced in each lesson.

The lessons are taught by classroom teachers for approximately fifteen minutes each day. The students analyze the visual and its contextual relationships, identify objects in the immediate environment which contain elements of the visual, and replicate the visual. A review lesson takes place at the completion of every four visuals.

PERCEPTION+ is a two-year program with two basic instructional units -- Level I and Level II. Level I is designed to be initiated at the kindergarten level, followed by Level II in the first grade. However, the design of the instructional materials is such as to allow for initiation at any grade level. The Tactuals for both Level I and II are currently being used with all types of impaired children, including those who are totally blind.

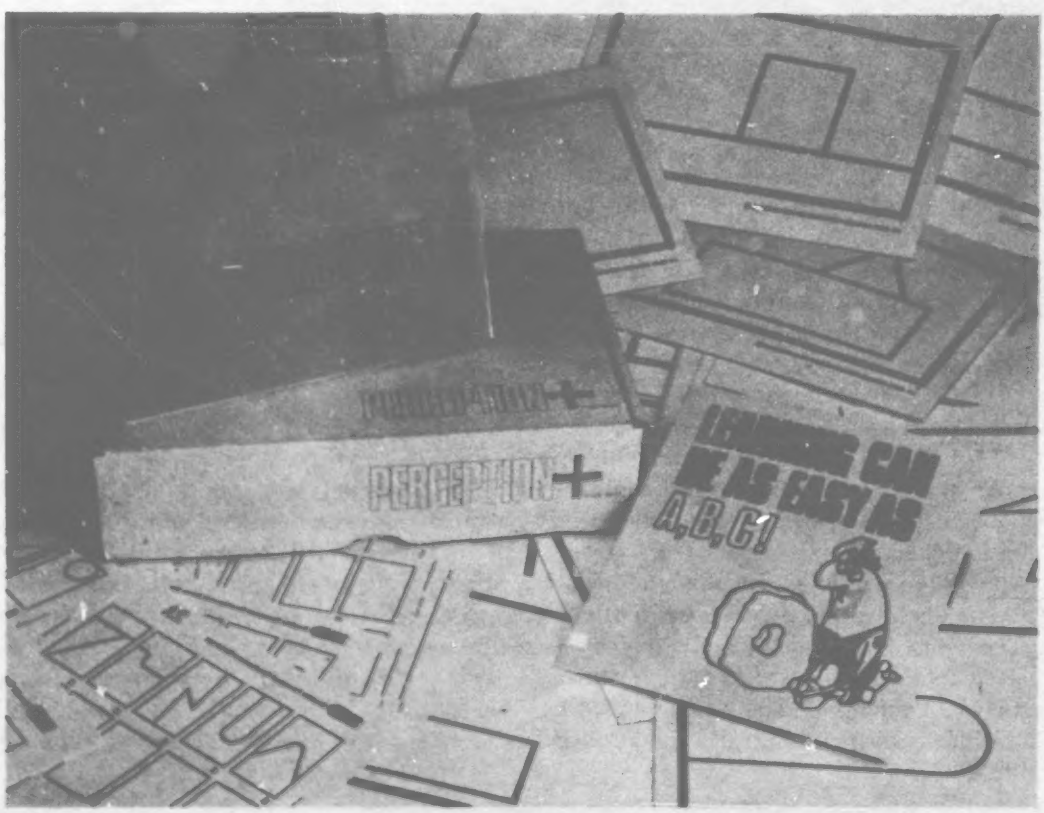
The kindergarten program has a series of forty visuals. These start with the most elementary single line element and progress to two noninteracting lines, two interacting lines, elements made up of three components, simple shapes, shape-line combinations, and shape-shape combinations. The elements of each visual are placed in a frame so that the students see them as part of a greater totality and analyze them with reference to their position in the frame.

*Approved for national dissemination

The thirty visuals for the first grade program, Level II, contain more difficult and complex elements. Students begin with a review of the last ten visuals of the kindergarten program and then progress to shape within shape combinations, shapes intersecting and overlapping other shapes, and shapes juxtaposed to give the illusion of a third dimension. The students describe the visuals, relate them to the environment, and replicate them as was done in the kindergarten program.

The instructional kits are completely self-contained and their classroom use requires no special instrumentation or room design. The teacher's guide included with each kit definitively describes the program structure and methodology and enables the teacher to replicate the program easily.

PERCEPTION+ was developed from 1971-73 as the ESEA, Title III Project SEE under the joint sponsorship of the Union Township, Board of Education and the Office of Program Development of the New Jersey State Department of Education. Validated in 1973, the project was approved for national dissemination in 1974 by the Joint Dissemination Review Panel of the U.S. Office of Education. In 1976 the program assumed a self-supporting status and is currently made available to interested educators through the Union Township Board of Education. Perception+ is now used in over 1,300 classrooms in approximately 30 states.



Visuals and tactuals from 25+ kits of PERCEPTION+.

ESSENTIAL ELEMENTS OF THE PROGRAM

The replication of this program in another site is defined as the use of the prescribed instructional program in kindergarten or first grade at least three days per week for approximately fifteen minutes per lesson over a seven month period.

GOAL, EVALUATION DESIGN, RESULTS

Goal

Students in project classes will show significant growth in visual literacy, that is, their ability to perceive the visual field with greater specificity.

Project and control students were pretested on both the Simkov Perceptual Organization Inventory (SPOI) and the three Knobler scales. The two groups were comparable on the Simkov and on two of the three Knoblers. On Knobler 1, Perception+ pupils were significantly higher than controls. After six months of Perception+, project and control classes were again tested on both the Simkov and Knobler tests. There were statistically significant differences in favor of the project group on all four tests (and sub-tests), indicating that the goal was accomplished by Perception+ during this six month period, since project children scored higher on the criterion referenced, locally developed Knobler Test and Simkov Test.

The second year program was an extension of the first, since testing continued among *kindergarteners* on an experimental and control basis as a check on the first year results. The testing yielded results at a slightly higher level of significance than had been obtained the first year. The number of students in the kindergarten experimental class was 770.

First grader experimental and control groups took the Knobler tests on a pre and post basis. The experimental group consisted of thirty-eight first graders of whom twenty-two had had one year of Perception+ and sixteen had not. The control group included forty first graders who had not worked with Perception+. The Perception+ experimental group scored significantly better on all three parts of the Knobler scales in posttesting.

COSTS

The program's adoption cost is approximately $30 per classroom for a set of instructional materials including the "Out of Sight" game for one teacher. Per pupil costs will be reduced if teachers share materials. If training is desired, training sessions take only 90 minutes and may be held during or after regular school hours. There is no charge for such training other than the travel expenses and, if necessary, the food and lodging for the project staff member.

DISSEMINATION SERVICES AND MATERIALS

The Union Township school system is the demonstration site for PERCEPTION+. Interested educators are invited to observe the program in action, examine its materials, receive training in its replication and purchase the instructional packages. A poster describing the project and order forms for materials may be obtained through the project center. Instructional materials are available at cost. Checks or purchase orders should be made out to PERCEPTION+ — Union Township Board of Education, and accompany an order for materials.

The project staff has prepared the following materials which are available at cost to interested educators.

Level I Instructional Package 30.00
Including
- 40 Level I Instructional visuals
- Level I teacher's guide
- *Spirit masters for the Knobler PERCEPTUAL DEVELOPMENT SERIES pre and post tests, Level I
- *Mimeograph stencils for daily and review work sheets
- OUT OF SIGHT perception game

Level II Instructional Package 30.00
Including:
- 40 Level II Instructional visuals
- Level II teacher's guide
- *Spirit masters for the KNOBLER PERCEPTUAL DEVELOPMENT SERIES pre and post tests, Level II
- *Mimeograph stencils for daily and review work sheets
- 12 photographs of blocks
- OUT OF SIGHT perception game

TACTUAL I Instructional Package 30.00
Including:
- 24 Three-dimensional instructional cards
- 6 student construction work cards with plastic pieces
- Teacher's guide

TACTUAL II Instructional Package 30.00
Including:
- 24 Three-dimensional instructional cards
- 6 student construction work cards with plastic pieces
- Teacher's guide

Project SEE Filmstrip-tape 5.00

*Instructional materials may be considered non-expendable except for the spirit masters and the mimeograph stencils. When necessary, replacements for these components may be ordered separately at the cost of $3.00 for each.

The project's development staff offers a two-hour training program for educators committed to using the program. Arrangements for the training should be made with the project director. The staff is also available to give orientation presentations to district staffs and to provide follow-up consultation to those using the program. There is no charge for these services.

Inquiries about the program, visitation, dissemination services and materials should be addressed to the project director or project assistant.

CONTACT PERSONS

Milton Knobler, Project Director
Director of Art
Union Township Public Schools
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Arlene Schor
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Perception+
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* Priority One: Environment
Pollution Control Education Center

Union, New Jersey

OVERVIEW

The Pollution Control Education Center's program, *Priority One: Environment* is a 13 unit, interdisciplinary program developed for elementary, junior high, and senior high school classes. The program has been designed to develop students' interest in the wise use and preservation of the biosphere and to give them an understanding of the threat that industrialized society poses to the balance of the ecosystem. Values clarification and decision making activities support informative materials in achieving high student involvement in seeking sound and practical solutions to the major environmental problems which face us today.

Unit content is varied and includes comprehensive coverage of the topics of solid waste and sewage treatment, and air, water, thermal, marine and seashore, and urban pollution. In other units pupils are actively involved in the critical environmental problems of open lands, wildlife, wetlands preservation, energy conservation, resource management, and community response – all presented in scientifically accurate and socially responsible settings.

Each multi media instructional kit engages a class in a variety of pupil centered, hands-on, problem solving activities which involve students in practical decisions concerning the appropriate responses they can make as citizens in order to solve environmental problems. The kits include imaginatively illustrated student booklets which relate new ideas to the students' own experiences. Student investigations provide pupils with the opportunities to have first hand experience with pollution and pollution control processes. These experiences are described on spirit-masters, experiment sheets, and activity cards so that a teacher may readily individualize instruction to meet a class member's specific needs and interests. The material in each kit is designed to be taught as a one or two week unit.

Audiovisuals enable pupils to observe phenomena which cannot be duplicated in the classroom. Filmstrips and film-loops, overhead transparencies, and audio cassettes are included in each kit to aid class discussions of important ideas. A comprehensive teachers' guide coordinating all of the elements of a kit enables a teacher to handle the program without specialized training. It contains an outline of the basic objectives of the unit in terms of "attitudes and values, knowledge and skills." A convenient chart is provided for scheduling the unit's work. Tests based on the material covered in the unit's work are included for appropriate grade levels.

*Approved for national dissemination

The secondary school program is appropriate for inclusion in regular science, health, and social studies classes as well as for instruction in urban studies or environmental science. The elementary grade program is designed for effective use by the regular classroom teacher.

Validated in 1974, the elementary grade programs were endorsed for national dissemination by the Dissemination Review Panel of the United States Office of Education and are used by school systems throughout the country. The secondary school programs were validated in 1975 and approved for national dissemination in 1976.

ESSENTIAL ELEMENTS OF THE PROGRAM

The program's use in another district is defined by inclusion of one or more units of study in the curriculum.

GOAL, EVALUATION DESIGN, AND RESULTS

Goal: Students in the program will increase their knowledge of topics related to controlling pollution of the environment.

All classes selected were of heterogeneously assigned pupils. Experimental classes were those who received instruction using the project materials. Two types of control classes were established. The first of these, Control Group A, was given the pretest and posttests and received instruction in the same subject matter as the experimental group. Commercial and

trade materials from a variety of publishers were used, but not the project materials. The second control group, Group B, was given only the pretests and posttests and was not given instruction on the subject matter. The tests were criterion-referenced tests developed by the project staff and were related closely to the instructional objectives upon which the units were based.

Stratified random sampling procedures were employed to select participants. The tests were checked for validity and reliability, and by experts in the subject matter areas for *content* validity. The consistency of performance of experimental and control groups was monitored also.

To check for reliability, the Kuder-Richardson formula 20 (KR20) procedure was used. Evidence of the validity of the elementary units' pre and post tests is seen in the consistency of the position of the control group (A) receiving environmental education instruction from materials other than those of *Priority One*. This group regularly scored about equidistant between the *Priority One*-taught experimental group and the group that received *no* instruction in environmental education (B).

Results: For all the *elementary* units, the experimental *Priority One* groups scored significantly higher than both A and B control groups. For the four *secondary* units it was again found that the *Priority One* groups scored significantly higher on their post tests than did the control groups.

The project was demonstrably effective. Students using project materials learn significantly more about pollution control than students receiving traditional instruction in the same subject matter, but not using the project materials. In addition to the test results, consistent reactions from the teachers and the student using *Priority One* materials indicate that the pupils learn new concepts which they did not know before and which are not now part of their out-of-school experiences. Furthermore, non-test responses and actions of participating students indicate a higher commitment to positive environmental attitudes, a further indication that the instructional objectives were achieved.

COSTS

Costs to program adopters relate to purchase of the individual units of instruction, and for a minimum level of staff training, if required (½ day).

DISSEMINATION SERVICES AND MATERIALS

The Pollution Control Education Center in Union is funded by ESEA, Title III as a demonstration site to offer interested persons the opportunity to see the program in classrooms, talk to teachers who participated in its development and now use it as part of the regular curriculum, examine program materials, and receive limited inservice training in the use of the materials. A member of the project staff is available to visit an interested district upon request.

The elementary grade units developed by the project staff have been published as "Priority One: Environment" and are available for purchase from McGraw-Hill, Webster Division. Permission has been granted by the New Jersey Department of Education for the Union Township Public Schools to copyright the materials and receive the royalties from their sale. The royalties are used to support the curriculum work of the Pollution Control Education Center.

Unit prices for the kits range from $85 to $135. Each kit provides one to two weeks of instruction for one class. The prorated per pupil cost for each unit of instruction can be figured as $.20 or less in a school of average size where the kits are used throughout the year. The materials in the kits are reusable.

Recommended for Grades 1, 2, and 3 (published spring 1974):

- Priority One: Environment Level 1
- Priority One: Environment Level 2
- Priority One: Environment Level 3

Recommended for Grades 4, 5, and 6 (published spring 1973):

- Air Pollution
- Solid Waste Management
- Water Pollution
- Marine and Seashore Pollution
- Thermal Water Pollution
- The Great Swamp

Recommended for the secondary grades:

- The Energy Challenge
- Air Pollution and Your Health
- Protecting Our Water Supplies
- Open Lands and Wildlife

These last four units are distributed at cost from the Pollution Control Education Center in the Union Public Schools, in whose name they are copyrighted. The purchase price is $60. The prorated per pupil cost for each unit of instruction is less than $.15 in a school of average size, where the kits are used throughout the year.

Inquiries about the dissemination services and materials available may be addressed either to the project director or the project disseminator.

CONTACT PERSONS

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Union, New Jersey 07083
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Arlene Schor, Project Disseminator
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Union, New Jersey 07083
(201) 688-1200

Project READ-WRITE

Newark, New Jersey

OVERVIEW

Project READ-WRITE is a program in reading and related Language Arts – especially writing – validated for grades 4-8. Its development, funded by ESEA Title III, was designed to help resolve the critical language problems of students in the intermediate grade-levels who often fall further behind national reading norms as their everyday classroom demands increase. Unless a system of careful diagnosis and effective prescription is applied, from grade 4 upwards, to meet children's individual needs in all categories of reading comprehension, the complex requirements of high school English and subject-matter curriculums cause frustration and failure.

It is difficult for the average school to install a successful program to meet children's individual reading needs because: most regular classroom teachers are not trained as reading specialists; Reading Resource Teachers can work only with students exhibiting the most serious reading deficits; and budgetary crises, especially in urban districts, preclude continuing investments in new kinds of reading materials, instructional packages and programs.

Project Read-Write meets these challenges. It is applied within the everyday classroom, by the regular teacher. It employs only those reading materials already in use in the classroom. It involves every child, addressing itself to the full range of reading needs in the intermediate-grade classroom, from phonics and structural analysis to inferential comprehension. It utilizes not only the Language Arts or English periods, but also the content-area periods during the day for reinforcement. It can be carried out as a developmental, corrective, or remedial program, or as a full system of diagnosis, prescription, and ongoing evaluation.

The project is built around a "basic communication spiral" which links the various Language Arts to motivate the reading process and make it meaningful for the youngster. The spiral begins with the careful previewing of each reading selection which is then read by the class and discussed to ensure that it has been fully understood on the literal level. Now, the prescriptions of Project Read-Write are applied, to deepen the children's personal involvement in what they have read, and their understanding of what it means.

The prescriptions are structured writing or oral activities which motivate the student: to express opinions, make comparisons, come to conclusions; to identify and reflect upon the significant features of a reading; or to carry out a parallel activity in free composition periods. Each of the 200 prescriptions designed by the project staff is geared towards a main reading objective and several ancillary objectives which represent a common core of over 75 broadly accepted items, ranging over the whole reading-skills spectrum, and relate to existing reading program, including basal programs.

The teacher selects the prescriptions which her class will require, after she has diagnosed the needs of her students; has summarized and prioritized them; and has then worked out a sequence for the administration of the prescriptions, meeting high-priority needs first. The teacher selects those prescriptions best suited to the maturity and interests of her class, or reinforces one prescription or part of a prescription with others to meet the objective.

The filled-in prescriptions are read aloud and discussed by the class, at the third stage of the communication spiral. The discussion enables: teacher and students to obtain consensus about the basic content and structure of the selection itself; and the teacher to build con-

nections between the completed reading and the selection which the children should read next. The spiral, then, sustains a stream of motivation from reading to reading.

At the heart of the prescriptions is a series of language-manipulation techniques derived from a highly successful Title IV-C Composition program.[1] Applied by the children in rewriting the prescriptions, they strengthen youngsters' sentence-sense; elicit oral vocabulary and convert it into sight vocabulary; reinforce both oral and reading vocabularies through writing activities; help children to frame phonics or structural-analysis generalizations inductively; and isolate main ideas, important details, and chronological and logical relationships within each reading selection. Most importantly, they compel every child to deal with the reading selection as a whole, instead of in isolated parts, and to involve in it his individual experiences, feelings, ideas and language resources through which he expresses them. It is that deep personal involvement which, psycholinguistically speaking, promotes full comprehension. The child himself furnishes the major resources of Project Read-Write, because every child, whether in an "inner city" or a suburban or rural district, possesses a full supply of those resources.

ESSENTIAL ELEMENTS OF THE PROGRAM

To replicate Project Read-Write, teachers in a consumer school must:

1. use a checklist of commonly accepted reading skills or objectives for the intermediate grades;
2. utilize diagnostic tests (preferably of the criterion-referenced type) to ascertain and prioritize the classwide, group, and individual reading needs of their students;
3. apply *on a consistent basis* the prescriptions which they have selected from the Teachers Resource Manual of the Project to address these reading needs on a priority basis;
4. maintain ongoing records of their students' individual progress in meeting these needs throughout the school year, and administer additional prescriptions as the prioritized reading needs are met; and,
5. reinforce the entire program by using the prescriptions not only in Reading and Language Arts activities, but also in other content-areas employing reading, writing, or oral discussion activities.

The program requires a minimum of one Reading period per day, but teachers are advised to extend it into Language Arts and the content-areas during the rest of each day.

GOAL, EVALUATION DESIGN, AND RESULTS

Goal: Students in the program (especially in grades 4-8) will show an average gain in aggregate reading of 8 months on the reading batteries of the Metropolitan Achievement Test for one year of instruction.

Evaluation Design: Comparisons were made of the median aggregate reading scores attained by 227 Project students in May 1975 and May 1976, respectively, on the Metropolitan Reading Test administered citywide annually. Statistical analysis of the data was done at the Computer Center of Jersey City State College, under the direction of Dr. Ronald Lesher, of the State Department of Education.

[1] See the Individualized Language Arts Program of Weehawken, page 45.

Evaluation Results: The results showed an average gain of 8.4 months for the students in grades 4-8. The gains for grade 6 (1.3 years) and grade 8 (1.0 years) were especially high.

COSTS

The cost of replicating the Project is basically that of staff training. Provision must be made for continuing staff supervision and support within the regular Reading and Language Arts program of the consumer school.

DISSEMINATION SERVICES AND MATERIALS

Validated in 1976, Project Read-Write is funded by ESEA Title IV-C as a demonstration site. One day each week has been assigned for visitors to the Hawkins Street School, the Hawkins Street Annex, or St. Rocco School to receive orientation in the program, view project materials, and observe the project in classrooms. Members of the project staff are available to give on-site orientation presentations upon requests from interested districts.

For consumer districts which commit themselves to replicate the program, the Project offers three full days of initial staff training, either within the consumer district, or at an Educational Improvement Center, or at some mutually agreeable location. Three days of follow-up consultation in the consumer district are also provided. The training and follow-up services are free of charge. The implementation cadre in the school district must include a liaison person (a Reading or Language Arts supervisor, or a building principal) who will provide administrative support for the program during the initial year, and who will serve thereafter as a turnkey trainer as the program is extended within the consumer district. The project team is available, also, to assist the consumer district in evaluation of the success of the program within the district, and in planning for its extension beyond the initial year.

The following materials will soon be available, either free of charge or at cost. Orders should be accompanied by a purchase order or check made out to the Newark Board of Education.

Overview Brochure	Free
Teachers Resource Manual (contains full description of how program can be applied, and entire body of prescriptions and techniques)	Price to be determined
Brochure on program management and support, for liaison persons	$1.00 per copy
Orientation film-strip	Price to be determined
Training film-strip	Price to be determined

Request for information about Project Read-Write and its dissemination services and materials should be addressed to the project director.

CONTACT PERSON

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Newark, New Jersey 07105
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Project S·A·I·L - Mathematics
Student Achievement in Individualized Learning

Wharton, New Jersey

PROJECT
S·A·I·L
MATHEMATICS

OVERVIEW

Project SAIL-Mathematics is an eclectic diagnostic-prescriptive mathematics program designed for middle school students (grades 6-8) with a range of topics from whole number place value to pre-Algebra skills and concepts.

A sequence of 25 mathematical topics is used to establish broad learning goals for students, while specific learning objectives for each student are determined by diagnostic test. Students then receive individual prescriptions based upon their learning needs.

A variety of materials and techniques are utilized in the prescriptions to provide students with many avenues for success: student-teacher conferences, student-student tutoring, large group instruction, small group activities, games, textbooks, mini-texts, workbooks, movies, worksheets, cassette tapes, filmstrips, activity cards, learning kits, and special projects.

The mathematics teachers continually monitor student progress via achievement tests (after each unit of study), student record sheets, homework assignments, quizzes, and in-class interaction with students.

ESSENTIAL ELEMENTS OF THE PROGRAM

- Skills and concepts hierarchy
- General diagnostic testing initially to place students
- Use of school's present instructional materials and/or project materials
- Student record sheets and record keeping system
- Use of pre-tests and achievement tests for each topic

- Use of large and small group instruction; student-student tutoring; and teacher-student tutoring
- Review quizzes to check retention levels
- Strong positive reinforcement and monitoring techniques and instruments to encourage maximum student achievement and parental contact.

GOALS, EVALUATION DESIGN, AND RESULTS

The goal of significant student improvement in standardized mathematics achievement scores after two years in the program was evaluated using the analysis of covariance procedure with pre- and post-test data. IQ scores served as an additional covariant. All computations were performed on the Rutgers University computer.

Data consisted of scores on the California Achievement Test. Kuder Richardson reliability coefficients for the test as a whole, as well as its subtests, ranged in the 90's. The content validity of the test was checked by comparing test items with program objectives. Over 90% of the test items were included in program objectives.

The consistency of the results over a three year period and the significance of the gains when compared to a control group provide evidence that the program is responsible for the improvements. The program allows all students to progress at their own rate. As a result, not only does the class as a whole score several months higher than expected by the end of the seventh grade, but individual students are able to achieve gains of several years.

Thus, the program offers substantial growth potential to students at various achievement levels. It was validated in 1975.

COSTS

The project was originally supported by the Wharton Board of Education without expense above normal program costs. ESEA Title III funding has supported validation and dissemination activities.

Start up and operational costs are approximately $3.73 per student for a classroom of 25 students. This figure includes a file cabinet, 3 project manuals, and reproduction costs of pre- and post-tests. Districts are encouraged to make use of current materials in addition to recommended new materials purchased with normally allocated district funds.

DISSEMINATION SERVICES AND MATERIALS

A brochure describing the project may be obtained free of charge from the project director. Interested educators, parents, and students may also visit MacKinnon Middle School in Wharton to view the actual operation of the program. Arrangements for such visits must be made in advance.

Project staff offers awareness and training workshops for interested districts without charge. Consumer districts are responsible for costs incurred for training and installation of the program.

The following project material may be purchased at cost, with checks or purchase orders made out to the Wharton Board of Education.

Teachers's Manual	$4.50
Pre & Achievement Tests	7.00
Test Key	3.00
Project SAIL filmstrip/cassette	17.50

Project material currently in progress includes 30 instructional student mini-textbooks and an administrator's manual.

Inquiries about the project and its dissemination services and material should be addressed to the project director.

CONTACT PERSON

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Project Director
Mathematics Coordinator
Wharton Public Schools
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Wharton, New Jersey 07885
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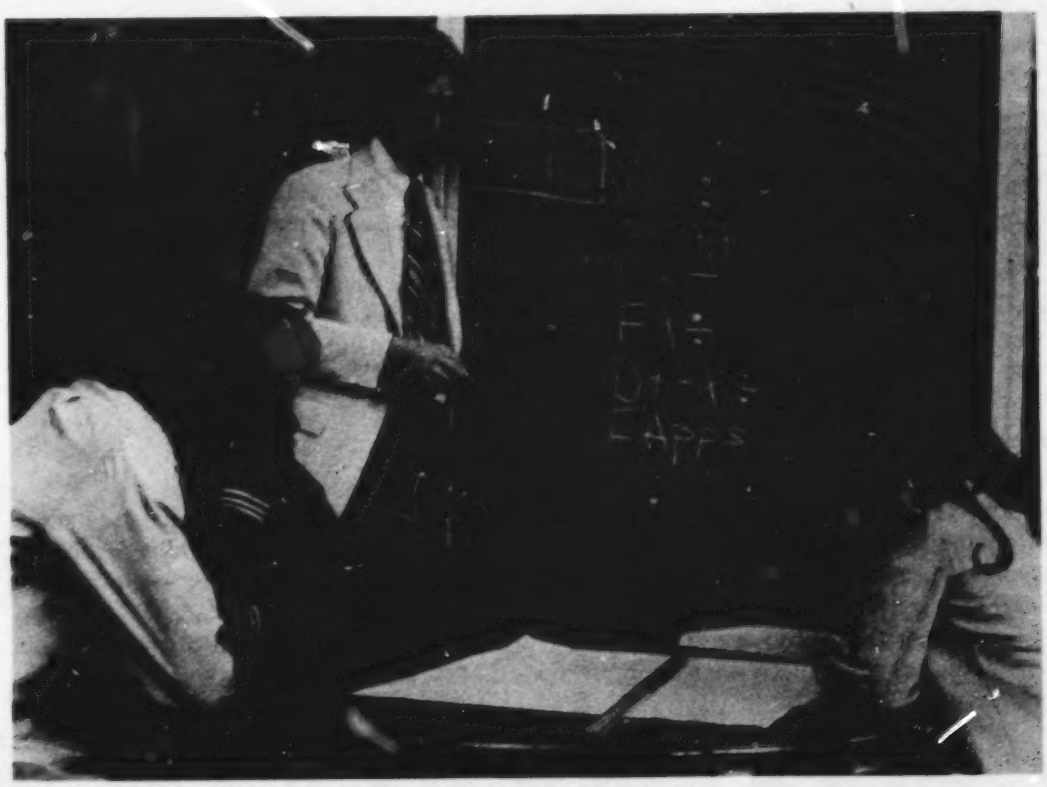


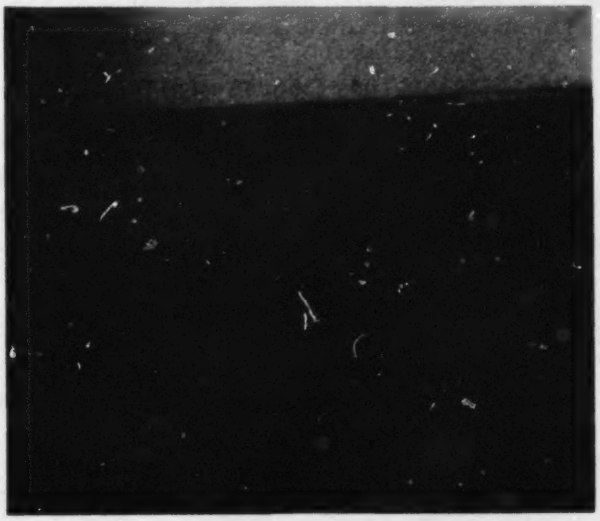
Secondary Study Skills Program

Cherry Hill, New Jersey

OVERVIEW

The Cherry Hill Secondary Study Skills course is a process oriented program in basic skills pursuits essential to the academic success of secondary students, especially in grades 7 through 10. The course is designed to increase competency in nine basic skills areas through cumulative, sequential development. These areas are: listening, finding main ideas, drawing conclusions, taking notes, taking tests, surveying textbook material, using parts of textbooks, locating specific information, and following directions. The program presently comprises three courses, each lasting for 25 sessions and geared to a particular group of "A" "B" or "C" students, according to their needs. Thus, not all 9 skills are taught in all courses. The format of the program is adaptable so that an adopting district can "custom-tailor" the individual skills units to fit its own needs.

In Cherry Hill Township, the course is successfully taught in two ways. In East High School, all 9th grade students have been required to take the course as part of the English curriculum since 1972. Initially team-taught by both the reading and English teachers, it is presently taught by English teachers only, with one of their members, the Project Director, serving as overall supervisor and coordinator. In West High School, a member of the reading staff selects students from English classes based upon performance on the course's pretests and instructs them in small groups in the reading laboratory. Results gained in this method appear to be equally as successful as those achieved in East High School.



Whatever the ability track – advanced, average or below average – all students use the program's pre- and post-tests, certified as valid by correlation with the McGraw-Hill Basic Study Skills Test and by an inter-rater reliability study. Progress during the course is noted by many written exercises and

quizzes, geared to the lessons taught. The pre- and post-tests also serve as excellent predicting devices for reading difficulties to the degree that the program has become the primary referral source for candidates for corrective reading instruction.

Motivation is a key element in the course. To counteract a negative attitude based on dread of endless, repetitious drill work, the course is as academically easy as possible even within the context of grading.

In addition, skills are taught in highly unusual ways; as an example, the listening lessons involve a "listening obstacle course" on tape, designed to arouse even the indifferent student. In many lessons, small group, self-instructional exercises are featured and the unexpected becomes the rule, such as in "The World's Most Unfair Test" which introduces students to the complexities of taking tests.

The sequence of lessons in the program is important to its success. Taught first is *listening,* the foundation for most information derived in the classroom. Students must listen for something — main ideas. *Finding main ideas* relates to *drawing conclusions.* Using these three skills as a foundation, students learn to *take notes* under simulated lecture conditions as preparation for *taking tests.* Life-related skills abound in the "C" course: students use real bank statements, phone books, employment applications and new car stickers to *locate information.*

Begun as an elective within the reading department at East in 1971, the program was made mandatory in 1972 with an organized manual prepared the following year, and expansion effected thereafter by the district's local instructional council. Funded by a one year ESEA Title IV-C grant in 1975, the program was revised to its present form and achieved validation in 1976.

ESSENTIAL ELEMENTS

The program's replication is defined by the use of 25 prescribed units from one or more of the three tracks, A, B, or C, as a basis for sequential development of the 9 basic skills: listening; finding main ideas; drawing conclusions; taking notes; taking tests; using textbooks; surveying; following directions, and locating specific information. An overall supervisor or coordinator of the program is essential for successful implementation.

GOAL, EVALUATION DESIGN AND RESULTS

Goal: As a result of completing a 25 session study skills course featuring nine skills areas, students will perform at a significantly higher level than students who do not take the course, as measured by pre- and post-tests designed to test operative use of the skills. All students should show a minimal ten percent gain over pretest scores.

Evaluation Design: The thirty-six 9th grade English classes at East High were scheduled into six time periods of six classes each, with the first three time periods as experimental classes and the last three as control classes. Ability levels were carefully matched in number and type of classes: if there were 3 "A" classes, 2 "B" classes and 1 "C" class in Time Period 1 (experimental), the control group in Time Period 4 had the same composition.

Following a pre test for all students in both groups the experimental groups received the course, while control classes continued in normal English classes. At the end of the course,

both groups were post-tested and the results were compared.

Two other testing procedures were used: Since the note-taking segments of the pre- and post-tests were subjective, an inter-rater reliability study was conducted whereby 60 pretests were selected at random and graded by seven teachers. Results were then compared for consistency. In addition, the Cherry Hill Interest Questionnaire was given to all students to determine their own rating for each of the sub-skills covered in the course, using a 1-to-10 rating scale for each activity in the course.

Results: The experimental groups scored significantly higher than the control groups in the use of the skills taught, with net gains (differences between experimental and control gains) as: A track, 12.3%; B track, 17.5%; and C track, 10.0%.

The inter-rater reliability study showed a 90% level of consistency on the note-taking segments of the pre- and post-tests. The student questionnaires placed most value on the motivational aspects of the course. Overall favorability was evident in 65% of the responses. Listening, note-taking, test taking and (for C track) locating information rated very highly.

COSTS

The cost for adopting districts is low and relates primarily to teacher training and purchase of materials. An overall supervisor or coordinator for the program is essential and may require a staff addition. No special environment or equipment is needed.

With a 9th grade population of four hundred students, start-up costs range from $19 to $25 per student. Continuation costs are approximately $16 per student. Cherry Hill's costs on a continuing basis are below $10 per student. This is due to the district's own media and printing center. A complete breakdown of costs is given in the Administrator's Manual.

DISSEMINATION MATERIALS AND SERVICES

The project is funded for dissemination by ESEA, Title IV-C to offer presentations and training free of charge to New Jersey districts. At East High School, visitors can observe classes, speak to faculty and students, and examine materials. Visits must be arranged in advance with the Project Director.

Dissemination materials are being prepared now. A technical brief and an overview brochure are available free of charge.

Districts expressing commitments for adoption are offered a three-stage training and consultation program free of charge by the project staff. These three steps are required of all adopting districts: (1) needs assessment, as determined by a questionnaire; (2) a two to three day workshop to train the adopting district's staff; and (3) on-going and follow-up assessment and consultation.

The project staff is currently completing these materials which will be available at cost by spring, 1977. Prices are contingent upon printing costs.

1. **Teacher Manuals** – 170 pp. each – A, B, and C versions.
2. **Student Manuals** – 70 pp. each – A, B, and C versions.
3. **Administrator's Manual** – 22 pp. – available now at Educational Improvement Center-South
4. **Workshop Manual** – 20 pp. – available now at EIC-South.
5. **Student Test & Quiz Packet** – 25 pp. each – A, B, and C versions.
6. **Cassette tapes,** A, B, and C tracks – set of 26.
7. **Transparencies,** A, B, and C tracks – set of 70.
8. **Locating Information Laminates** – A, B, and C tracks – set of 85.
9. **Supplemental Exercise Ditto Masters** – set of 99.
10. **Cassette/filmstrip, Overview of Program.**

Inquiries about the project, its dissemination services and materials should be addressed to the project director.

CONTACT PERSON

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* Senior Elective Program
Rumson-Fair Haven Regional High School

Rumson, New Jersey

OVERVIEW

The Senior Elective Program, designed by eighteen high school students and six high school faculty members in the summer of 1971, was initiated as part of an effort to update curriculum and as a complement to the construction of an open-space building to be used exclusively by seniors. The study group made the following recommendations to the Board of Education:

1) Redesign the school calendar from four marking periods to five, called "facets," each to conclude with one of the regular vacation periods.
2) Encourage students to telescope the traditional academic courses into the first three years of high school, thus leaving the senior year primarily for elective courses.
3) Design senior elective courses to reflect student and faculty interests. Electives should vary in length from one to five facets and be graded either pass-fail or with letter grades according to student choice.
4) Encourage seniors to develop independent study projects under the guidance of a faculty member during the middle two or three facets.
5) Assign seniors randomly to small discussion groups or "precepts" led by faculty members whose goals would be to provide support for independent study and contribute to individual understanding through group interaction.
6) Allow seniors the freedom of an open campus whereby they attend classes but need not be present during unscheduled time.

These curricular suggestions were refined during the 1971-1972 school year. Teachers worked on new courses of study. Administrators, department chairmen, guidance counselors and teachers were trained in alternative teaching styles. Preceptors were chosen and students were assigned randomly to them. Students were carefully counseled to make certain that course selections would support anticipated education and vocational pursuits, and a master schedule was drawn up for the new curriculum.

Concurrent with the curriculum revision an open-space building was erected consisting of five learning areas each of which may be subdivided by flexible, movable partitions. Stacking chairs, arm chairs, study booths, tables and open-offices were selected for each department. Learning areas were outfitted with blackboard space, projection screens and storage

*Approved for national dissemination

closets. The senior building with its new curriculum opened in September, 1972, and is now fully supported by the local Board of Education. The program serves approximately 320 students per year.

Validated in 1974, the program was approved for national dissemination by the Dissemination Review Panel of the United States Office of Education.

ESSENTIAL ELEMENTS OF THE PROGRAM

The program's replication in another site is defined by:

1) independent study programs
2) mini-courses
3) preceptorials

GOALS, EVALUATION DESIGN, AND RESULTS

Students totally participating in the alternative program at Rumson-Fair Haven High School were considered the "treatment" group. Students completing a conventional program at a school in another district were the "comparison" group. The comparison of the students in the two schools shows that, though not identical, all are clearly at the upper end of both the intelligence and socio-economic scales. Students in the comparison school are slightly higher on both the intelligence and socio-economic scales, necessitating a statistical adjustment.

All tests were administered two weeks before graduation to a random sample of sixty-three seniors from Rumson-Fair Haven and seventy-three seniors from the conventional high school.

Goal #1

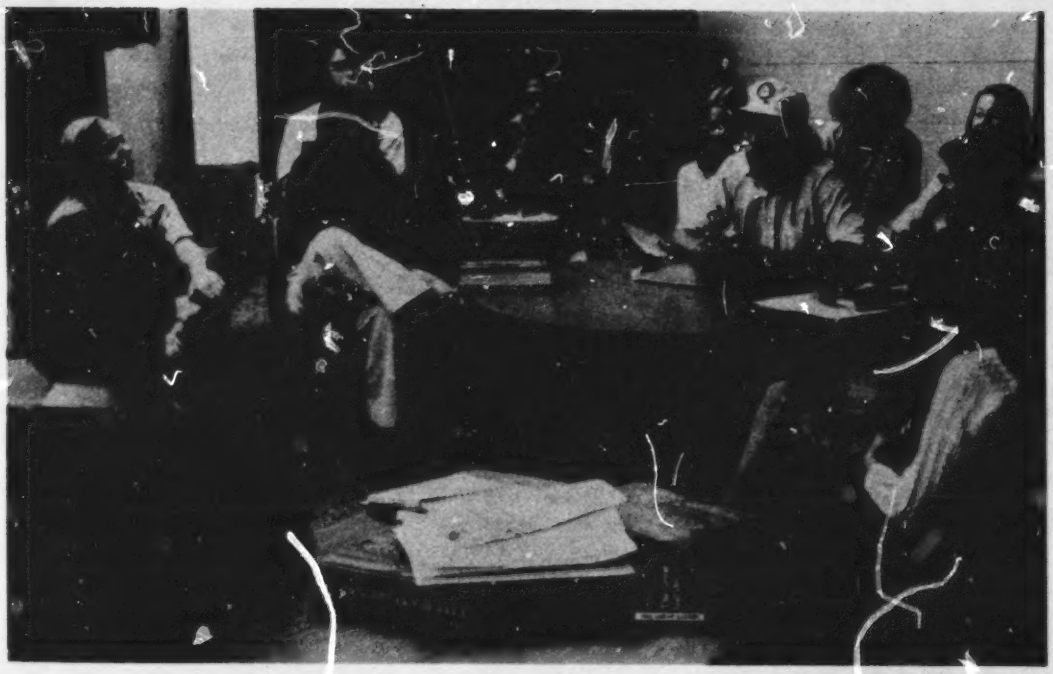
Rumson-Fair Haven Regional Senior High School students participating totally in the alternative senior year program will achieve as well as students participating in a conventional program in their knowledge and use of social studies concepts.

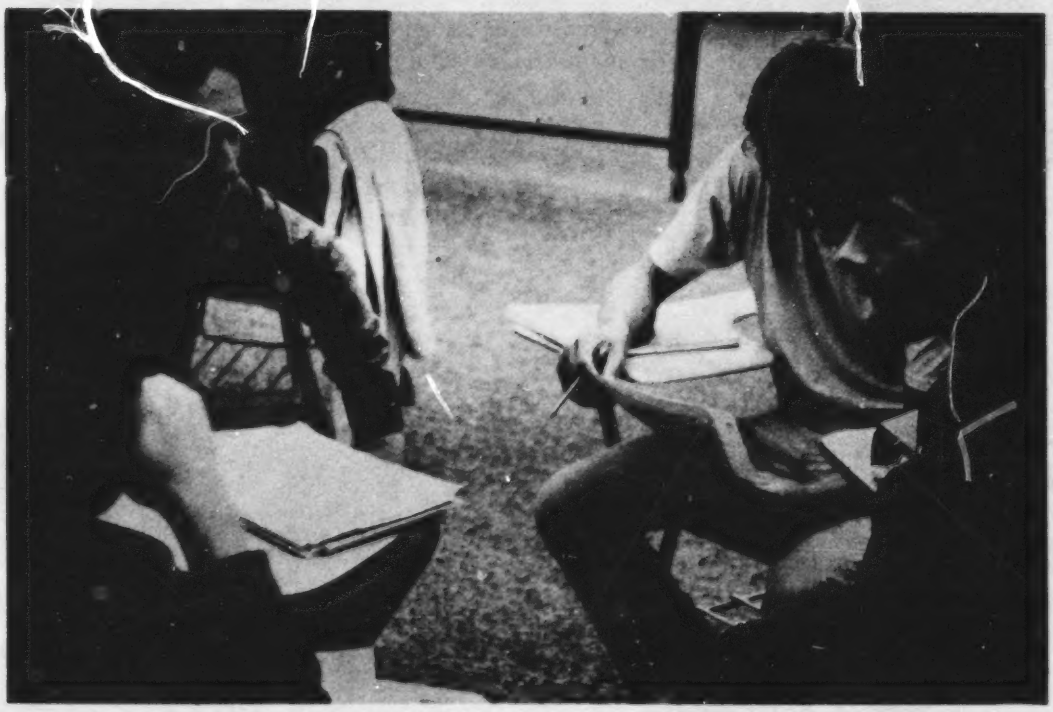
The Sequential Test of Educational Progress II: Social Studies (1969) was used to test this goal, since the social studies area was considered the most "innovative" aspect of the elective program. The Rumson and control students in another district were compared using an analysis of covariance. On the STEP Social Studies Test no significant difference was obtained, indicating that the two programs were producing the same amount of learning in social studies. The adjusted means slightly favor Rumson-Fair Haven students, although the difference is small.

Goal #2

Rumson-Fair Haven Regional High School Seniors participating totally in the alternative senior year program will significantly exceed students participating in a conventional program in their satisfaction with, and interest in, their current educational experience.

Two indices of school sentiment were used. The first, *Imagine That,* is a measure primarily of attitudes toward the teaching process experienced. The second, the *School Sentiment Index* developed by the Instructional Objectives Exchange (IOX) at U.C.L.A., measures general attitudes toward the whole school experience. On *Imagine That,* the Rumson-Fair





Haven seniors had a significantly higher adjusted mean than seniors in a conventional program. The Rumson-Fair Haven seniors felt significantly better toward the teaching they had experienced in the alternative program. In addition, the results on the *School Sentiment Index* also support the finding that the Rumson-Fair Haven seniors felt better about their school experiences. The Rumson-Fair Haven seniors had a significantly higher adjusted mean than the high school seniors in a conventional program.

COSTS

Replication costs will vary with the staff and curriculum resources of potential adopter districts. Provision must be made for cooperative planning among students and staff, curriculum revision, and staff preparation. To some extent these costs should be covered by a reallocation of current expenditures.

DISSEMINATION SERVICES AND MATERIALS

The Rumson-Fair Haven Regional High School has been funded by ESEA, Title IV-C as a demonstration site where visitors may see the senior elective program in operation and talk to participating students and staff. Requests for a visit and/or a brochure describing the program should be made to the project director.

For educators in the State of New Jersey, who sign a commitment to replicate the program, the Rumson-Fair Haven staff offers training and follow-up consultation free of charge. Educators out of state must pay expenses and consulting fees.

The administrative and teaching staff of the Rumson-Fair Haven Regional High School district have prepared the following materials available to interested educators free or at cost. Checks made payable to the Rumson-Fair Haven Board of Education should accompany orders for materials and be mailed to the project director.

Final Project Report	Free of charge
A Resource Compendium and Profile of the Rumson-Fair Haven Regional Senior Elective Program (Outlines of seventy-six mini-courses)	$7.00
Filmstrip-tape The Senior Elective Program	$8.00

Courses of Study in:	
Social Studies	$2.50
Business	1.00
Industrial Arts	1.00
English	1.50
Science	1.50
Administration Manual	1.00

Inquiries about the project and its dissemination services, training, and materials should be addressed to the project director.

CONTACT PERSON

Newton Beron, Project Director
Assistant Superintendent
Rumson-Fair Haven Regional High School
Rumson, New Jersey 07760
(201) 842-1597

AN ADMINISTRATOR'S MANUAL
FOR THE SENIOR ELECTIVE PROGRAM
COURSE OUTLINES IN BUSINESS
COURSE OUTLINES IN INDUSTRIAL ARTS

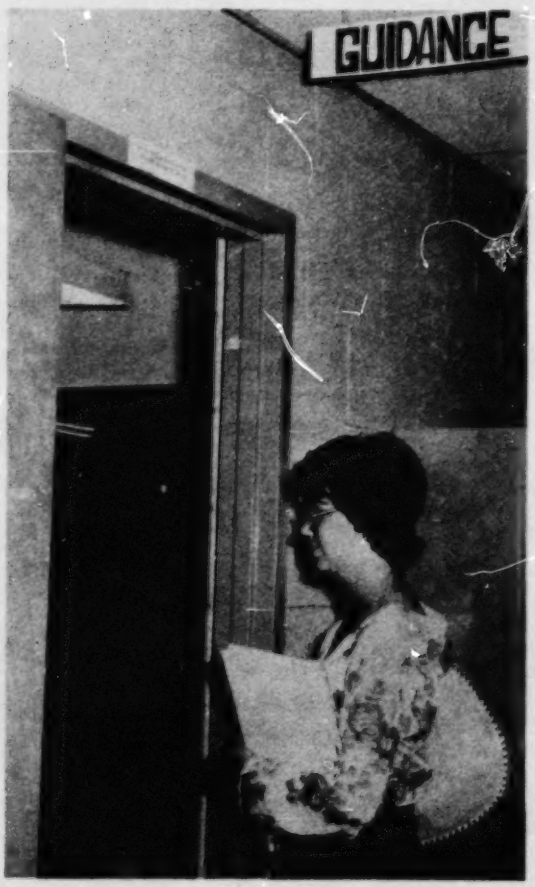
Teacher-Advisors in a Ninth Grade Guidance Program

Hazlet, New Jersey

OVERVIEW

The Teacher-Advisors in a Ninth Grade Guidance Program, developed at Raritan High School in Hazlet, is a guidance oriented project which uses the regular teachers as adjunct part-time advisors in the Guidance Department, in order to meet the special needs of ninth grade students. These advisors work under the direct supervision and control of the professional guidance counselors.

With enrollment at the high school averaging 2000 students including 500 ninth graders, and only five professional guidance counselors available, each counselor was responsible for some 400 students each year, a considerably heavy load. Since counselors devote more time to the upper classmen whose problems appear more urgent, freshmen were often deprived of adequate guidance necessary during a critical period of their school life.



The Guidance Department and the school administration felt that this lack of adequate guidance services might be partially responsible for the poor orientation of the students indicated by a high rate of absenteeism, a high failure rate and a lack of interest in the extra curricular life at the school, as noted in a survey conducted by the department in the spring of 1973. The Teacher-Advisor Guidance Program was developed to satisfy these needs.

Under the program, ten classroom teachers serve as teacher-advisors working under the direction of the five regular counselors, two advisors each, with 50 students to each advisor. They are trained at an in-service workshop before the start of school, with

weekly follow-up training for the first three months of school, and in bi-monthly sessions thereafter.

The teacher-advisors work for one class period daily in the guidance office in addition to their regular five teaching assignments. When possible, they are relieved of all other non-teaching duties such as hall monitoring and cafeteria duty. During the year's in-service training period the teachers received a stipend of $300 as compensation for the time spent after school attending the training sessions.

Working closely with their assigned counselors, the advisors meet with their freshmen early in the school year and periodically throughout the entire year, at least 3 times: to make the students feel secure in the new high school environment; to develop in them good attendance habits; and to assist them with course scheduling. Students who appear to have serious problems are referred to the regular counselor.

The project thus provides adequate guidance services to all ninth grade students upon their entry into high school and throughout that crucial first year. It facilitates their adjustment to high school in the areas of study habits, attendance and participation in extra curricular activities. It overcomes the guidance problems inherent in a large, comprehensive high school where the number of counselors is inadequate for the heavy load.

After its first year of development, a one-year grant by ESEA Title III provided for further development and evaluation, which culminated in validation in September 1975.

ESSENTIAL ELEMENTS OF THE PROGRAM

The program's replication in another site is defined by 1) The assignment of a classroom teacher to each guidance counselor for a unit of 50 ninth grade students to work under the supervision of the counselor in the guidance office as outlined in the validated Raritan High School project, 2) provision of an in-service training program for the project staff of at least 25 hours as recommended by the Raritan project staff.

GOAL, EVALUATION DESIGN, AND RESULTS

Goal: As a result of their experience in the program, the students demonstrate a better adjustment; are able to function more efficiently; and are assisted in the development of habits which should lead to greater success. This is measured by:

1. A reduction in absenteeism of 5% as compared with the freshman class before the program.
2. Improvement of academic success with a 20% reduction in course failure as compared with the freshman class before the program.
3. An increase of 20% in the participation by ninth graders in extra-curricular activities over the previous freshman class.
4. An increase in the number of formally scheduled conferences on a regular basis from the former average of one per year to three or more per year.
5. An increase in individual counseling for course selection to 100% of the students.

Evaluation Design: Goals 1 and 2: An evaluation is made at the end of the school year by comparing the official attendance register with the total number of students who were ab-

sent the previous year, by tabulating the number of students who failed course work at the end of the year and comparing it to the number who failed the previous year.

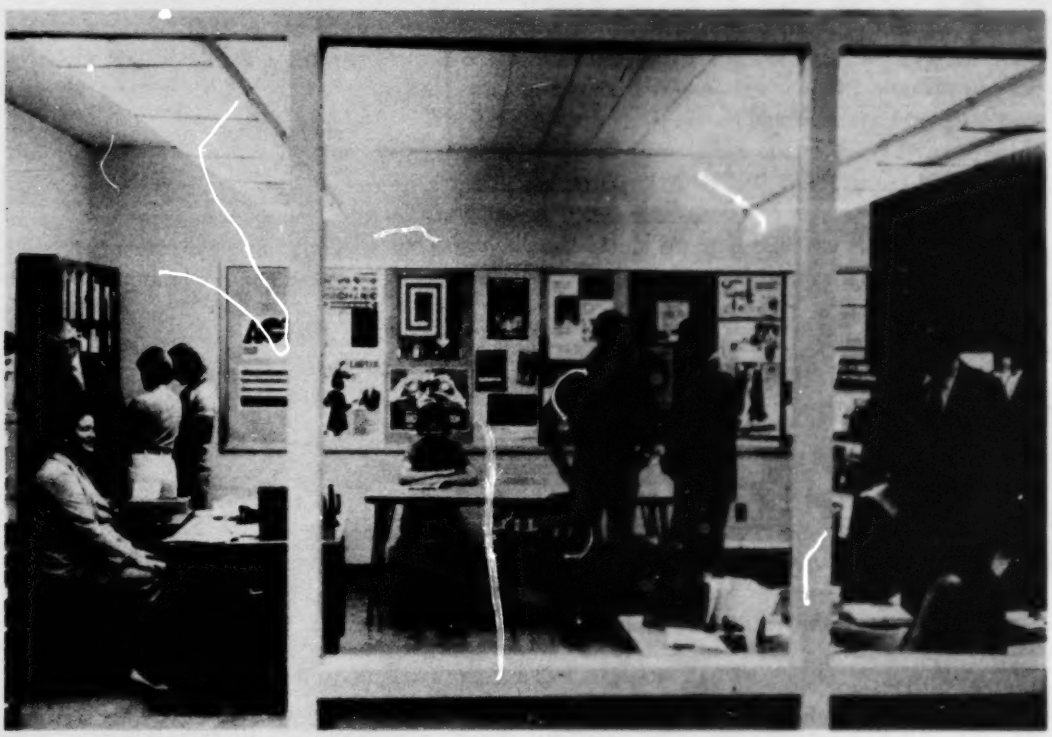
Goal 3: To determine the increase in participation in extra curricular activities a student activities questionnaire is administered to all ninth grade students at the end of the year and the number of participants compared with the previous year.

Goals 4 and 5: To determine the increase in student conferences the advisors and counselors must keep accurate records on the conference record cards and retain their daily appointment sheets so that an accurate tabulation can be made at the end of the year. Although an attempt is made to reduce the number of class cuts, no projection can be made as to any reduction in percentages, since the record keeping on cutting has not been fully developed at this time by the school.

A student and teacher questionnaire survey is also conducted at the end of the year to judge the effectiveness of the teacher-advisor/counselor efforts.

Results: In its first two years of operation the program has been highly successful in meeting both the needs and the established goals. It has involved over 1000 students and 13 different teachers as advisors. The yearly cycle of activities is now completing its third year with the third ninth grade class of over 500 students.

For all goal indicators, with one exception the first year only, the levels established for the objectives were met or exceeded the first two years. The exception is the absenteeism indicator, in that the level of absenteeism was contained at the previous level after the first year of operation, but after the second year the goal of a 5% reduction was achieved.



A secondary goal, to benefit the counselors, is to relieve them of routine conferences with ninth grade students, thus reducing their counseling load to allow more time for counseling those students with serious problems.

Positive opinions of the program's worth have been expressed by all persons involved with the program, including students, parents, teachers, administrators, counselors and the Board of Education.

COSTS

The principal costs of the project's original development were minimal, consisting primarily of the monies to pay the teacher-advisors for time spent after school hours in the in-service training sessions. Since all persons on the project staff are already under contract to the board with regular teaching salaries, no additional cost was incurred in the program's implementation.

DISSEMINATION SERVICES AND MATERIALS

The project has been funded by ESEA Title IV-C as a demonstration site where visitors may see the program in action, examine its materials, talk to staff and students and receive orientation training in its replication. The following materials are available free of charge, or at cost as designated.

Teacher Advisor Training Manual (42 pages)	$3.00
Administrator's Guide	3.50
Project Description brochure (15 pages)	Free of charge
Filmstrip Cassette	15.00
Technical brief	Free of charge

There is no charge for the orientation training or follow-up consultation services of the program's staff. Adopting districts are responsible for the costs of installing the program elsewhere. To be eligible for the services offered, interested persons must give evidence of their intent to use the program and willingness to answer evaluation questionnaires on its effectiveness and impact in another site.

Inquiries about visitation, materials and orientation sessions should be addressed to the project co-directors.

CONTACT PERSONS

William P. McDermott
or
Robert T. Dudley, Project Co-Directors
Raritan High School
Middle Road
Hazlet, N.J. 07730

United States History: A Differentiated Approach to Learning

Pitman, New Jersey

OVERVIEW

U.S. History, A Differentiated Approach to Learning (DAL) is a two year social studies program for high school students. The heterogenously organized classes offer the student a variety of learning activities: 1) *Large group,* teacher-dominated classes are used to present concepts, audio-visuals or outside resource persons. 2) *Small group* situations create an atmosphere wherein students can interact in groups of ten to fifteen persons. 3) *Independent study* activities permit students to develop individual skills according to their ability and interest. The three activities are organized under a team-teaching approach.

The program is divided into sixteen learning units, each four to five weeks in duration. The units are:

Year I	Year II
Constitution	Economics
Practical Politics	New Deal and World War II
Manifest Destiny	Communism
American Indian	Cold War
Civil War	Black Studies
Reform in America	Sixties
Industrialism	Biographies
Progressivism and World Power	Then, Now, and Someday

Each student receives a student learning packet with each unit. The packet contains: unit rationale and goals, behavioral objectives, large and small group situations, independent study guidelines, unit assignments, due dates, schedule and grading procedures. The student follows the packet guidelines and teacher planned activities to complete the unit work.

The program serves annually between 350 to 400 tenth, eleventh, and twelfth grade students at Pitman High School and has been in existence in Pitman since 1972. Developed to meet Pitman's needs, it was funded by ESEA Title III for one year of evaluation studies which led to validation in 1975.

ESSENTIAL ELEMENTS OF THE PROGRAM

A replication must use the unit approach with student learning packets containing differentiated student activities. The activities must include large group, small group and indepen-

dent study situations. Provision must be made for a Social Studies resource center or school multi-media center to store the basic texts and supplementary commercials used by the students for needed information.

Another school may adopt the project as written, alter the project units to meet specific adopter needs or adopt the project's methodology to locally developed materials.

GOALS, EVALUATION DESIGN, AND RESULTS

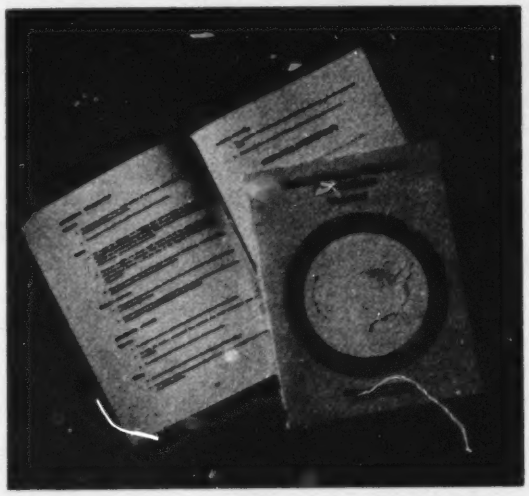
Goal #1

Students in the program will demonstrate significantly greater achievement on a sample of standardized instruments related to history content.

Program students were randomly selected for a pre-test/posttest evaluation design. The three standardized instruments used were: Cooperative History Test; Civil War and Reconstruction; Cooperative History Test; World War II and Aftermath, and SRA Test of Economic Understanding. The pre- and posttest scores were compared. Test results showed that all comparisons were statistically significant.

The evaluation design shows growth as a result of program exposure. It appears that the program enables students to increase general cognitive knowledge significantly in a curriculum that plans only one third of the classroom activities in a teacher dominated cognitive situation.

Goal #2



Students in the program will demonstrate a significantly greater ability to relate their personal feelings and make value judgments based on factual knowledge over students in traditional programs as measured by "Survey of Groups."

Three randomly selected groups of students were selected at the project school and a control group school. The instrument "Survey of Groups, Prejudice and Rationality" was administered to one sample at the beginning of the program, one sample at the end of one year of instruction, and the third sample at the end of two years of instruction.

The instrument, "Prejudice and Rationality," yields two scores; irrational anti and irrational pro. The project and control group students were compared by using the Hotelling's T2 procedure. Project students exhibited significantly fewer irrational anti responses than control group students.

The results showed that, over the two year span of instruction, project students moved from a position of greater irrationally-founded answers to a position of less irrationally-

founded answers against minority groups. Thus, the project students became more rational in their judgements than control group students.

COSTS

To replicate the program, an adopter district's main costs lie in initiating the program. Staff training, teacher manuals, project materials, and training sessions must be financed before program implementation. Once the program is implemented, the costs are the same as a traditional program. Teacher training is provided to New Jersey districts free of charge.

DISSEMINATION SERVICES AND MATERIALS

The project is funded by ESEA, Title IV-C to offer visitation opportunities, training and professional consultation, and to disseminate materials on the project program to interested educators. A technical brief describing the project is provided free of charge. The following materials are available at cost.

U.S. History: Differentiated Approach to Student Learning Volume I (226 pages)	$7.25
U.S. History: Differentiated Approach to Student Learning Volume II (230 pages)	7.25
Teacher Resource Manual — Writing a Curriculum	3.50
Final Project Report	Price to be determined

The project director and staff offer training sessions for districts interested in adopting or adapting the program. Consumer districts are responsible for the costs incurred for training their staffs and installation of the project. Inquiries about the program, materials or training services should be addressed to the project director. Checks or purchase orders made out to the Pitman Board of Education should accompany orders for materials.

CONTACT PERSON

R. Marshall Genter, Project Director
Pitman High School
Linden Avenue
Pitman, New Jersey 08071
(609) 589-2121

Project WORK-ED
World of Related Knowledge and Educational Development

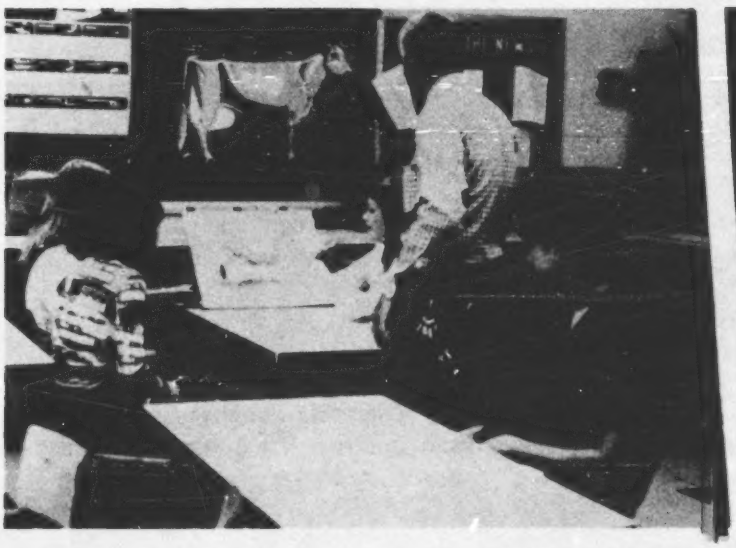
Hackettstown, N.J.

OVERVIEW

Project WORK-ED is a year long career-education course of study for 9th graders designed: to make non-college bound students aware of the many careers available; to enable them to evaluate their own interests and abilities with respect to future goals; and to qualify them to make appropriate choices among high school courses in preparation for their careers.

Introduced into the curriculum of Hackettstown High School in September of 1974, funded by ESEA Title III, the program was developed with a pilot group of 100 students, most of whom had experienced academic, behavioral, and attendance problems in elementary school. The rationale for the target population was that success with this group would ensure success with all ninth graders. One year later, in September 1975, project WORK-ED was validated according to the standard and guidelines of the U.S. Office of Education.

WORK-ED is a daily two-period course comprising two major components: an area of *basic skills in communications,* and an area of information and experience in *career clusters.*



The Communications area emphasizes *skill proficiency* in teaching communications skills necessary to survive and to succeed in the world of work. The students spend one marking period (one quarter of the year) with each of four English teachers to cover all aspects of communications with emphasis upon four: human values, reading, oral skills, and general writing and practical communication skills. In sum, the communications area details those skills necessary to research, prepare for, obtain, and keep a job.

The Careers area stresses *exposure* to eight separate career clusters taught by industrial arts and classroom teachers who attempt to make students aware of the varied careers available to them in each area. The more exposure the student experiences, the wider his career choices will be. In groups of 12, to encourage individualization, the 9th graders are cycled through eight career clusters for 22 school days each: Agriculture, Home Economics, Business, Graphic Arts, Health Careers, Drafting, Wood Shop, and Career Guidance. In Career Guidance, the students are made aware of their own interests, abilities, and future goals through testing, group and individual counseling, and career research.

In the other career clusters, activities cover a wide range: the students receive hands-on experience, go on field trips to various community industrial sites, visit area technical schools available for them to attend part-time or full-time during their high school and post high school years, view career films, and interact with community guest speakers from all career clusters. Pre and post career awareness inventories are conducted in each career cluster.

The 9th grade program is an outgrowth of an on-going work-study program for 11th and 12th grade students started two years earlier with 300 students but not as yet validated. It arose from recognition of the need for earlier decision-making.

Project WORK-ED has great applicability for school districts with large populations of non-college bound students and for urban areas, in a threefold manner: it stresses skill proficiencies needed by students to secure and maintain jobs; it exposes them to careers available in their communities and in the world, many of which would be otherwise unknown to them; and it enhances their own feelings of self-worth in its aspects of values clarification.

ESSENTIAL ELEMENTS OF THE PROGRAM

The program's replication in another site is defined by:

1) curriculum implementation in all four Communication courses,
2) curriculum implementation in at least 5 of the 9 Career courses of study, including Career Guidance,
3) participation in the two training workshops,
4) community involvement, guest speakers, and field trips.

A district may choose to adapt areas of the program rather than adopt the entire program as described above; it thus can utilize the Communication area or the Career area depending on its individual needs and existing programs.

GOAL, EVALUATION DESIGN, AND RESULTS

Goal: Ninth grade students who have not chosen the traditional college prep high school course, will make career choices based on occupational information and ability to select goals.

The Crites Career Maturity Inventory was administered on a pre- and posttest basis. Test scores were analyzed by a T test which showed that the students scored significantly higher on the post test over the pre test in the area of *Occupational Information* and *Goal Selection.*

In a written student survey, 98% of the students stated that their knowledge of careers had increased, 97% indicated that the course was helpful and relevant to them, and 71% stated that they had made tentative career selections as a direct result of the program. All students in the program justified their 10th grade course selection by correlating it with their future career goal.

A written and taped survey was administered to the 11 teachers and 3 counselors involved with the students for one year. All indicated that the goal of the project was met and that significant growth in career maturity on the part of the students was evidenced as a direct result of the program.

Additional evaluation of the program indicates that students find high school more relevant as indicated by: less disruptive behavior; decreased drop-out rate; decrease in vandalism; decreased truancy; and decreased absenteeism.

COSTS

The cost of replicating the program relates to staff training, materials, and evaluation. The materials developed by the project staff are available at cost and are utilized *in place* of 9th grade curriculum material rather than in addition to the 9th grade material utilized in the past. After initial start-up investment for staff training and materials, the program's maintenance should not require an increase in a district's operating expenses.

DISSEMINATION SERVICES AND MATERIALS

Validated in 1975, project WORK-ED is funded as a demonstration site by ESEA, Title IV-C to offer educators the opportunity to see the program in action, talk to students and staff, examine its materials, and receive training and follow-up consultation in its replication. The project staff will provide a brief awareness session at teacher training institutes or at sites where 25 or more interested persons are present. This session consists of a film overview of WORK-ED, materials used in the program, and articulation with the project staff. A two-day training session plus follow-up consultation are available to the staffs of districts that make a commitment to replicate the program. Personnel to be trained must include an administrator, guidance counselor and one teacher from each of 5 career clusters, at the least. There is no charge for the services of the project staff. Consumer districts are responsible for costs incurred by their staffs for training and program installation.

The following materials have been prepared by the project staff and may be purchased at cost. Checks or purchase orders should be made payable to WORK-ED and accompany the order.

WORK-ED — The Changing World of Work $7.50
A curriculum manual for teachers with student material for duplication. (186 pages)

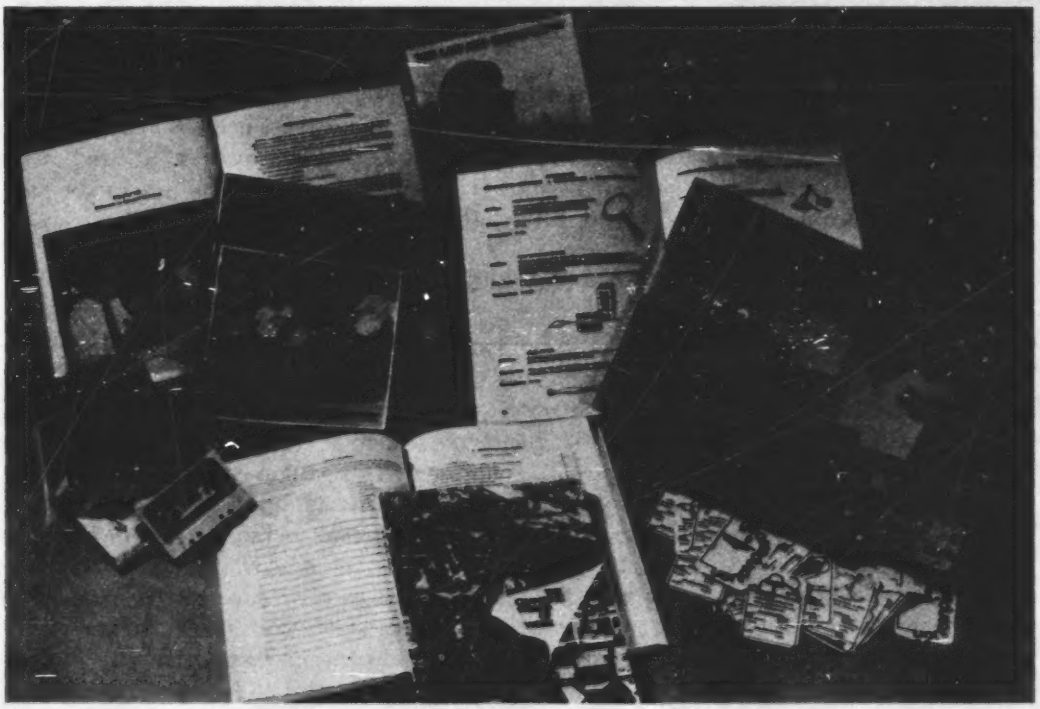
WORK-ED Administrator's Manual 5.50
Administration and coordination responsibilities for the start-up and maintenance of the program (50 pages)

Filmstrip/tape: Overview of Project WORK-ED 12.00

Inquiries about the dissemination services and materials available from Project WORK-ED should be addressed to the project director.

CONTACT PERSON

Virginia A. Fraleigh, Director
Project WORK-ED
Hackettstown High School
Warren Street
Hackettstown, N.J. 07840
(201) 852-2800



Materials in career education and guidance developed by New Jersey projects aid students in career awareness.

SECTION II: Successful New Jersey Educational Programs Whose Materials May be Ordered

The three programs described in this section were developed and validated through the New Jersey ESEA, Title III program and have prepared written and audio-visual materials which are available to interested educators. The projects are no longer funded to work with districts although some members of the project staffs may be available on a limited basis to discuss their programs with interested educators. Materials may be ordered as specified in the program descriptions.

Changeover to Individualization
Project Open Classroom

Wayne, New Jersey

Project Open Classroom is characterized by the openness of administrators, teachers, and students to new ideas and initiatives, and their sensitivity to and support of other people. Teachers and students are freed from the constraints of time prescribed by a lock-step curriculum. Open classroom doors and halls allow students to move freely, yet with responsibility. Open curriculum choice permits students to work in areas of their interest, when and for the time they wish. The open classroom environment stimulates learning by providing structure with choice for both students and teachers. The project was developed over a 3-year period, 1971-1974, and achieved validation after its second year, in 1973.

The project staff recommends teaching strategies to foster individualized instruction such as task cards, learning centers, providing manipulative materials for students, flexible scheduling, and frequent regrouping of students to meet individual needs. The project's evaluation showed that students in Open Classroom had more positive attitudes and self concepts than did those in the control groups and that children maintained the same rate of cognitive development while in Open Classroom that they had prior to entering the project.

Project Open Classroom Grew Into an Individualized Program of Instruction

Although individualized education programs may vary from classroom to classroom, teachers who individualize learning generally demonstrate a more process-oriented approach to education in regard to the objectives of instruction, use of learning materials, and attendant activities. They also interact with and evaluate students on a one-to-one basis and keep more expansive records. The individualized classroom is a productive place, where the work of learning goes on in an orderly fashion even though children are permitted free movement and are permitted to talk in the classroom.

The following materials have been prepared by the project staff:

Language Arts Kit: 379 task cards for students, ages 6-11 (second printing)	$30.00
Math Resource Files: Primary and Intermediate Levels (2nd edition) Primary kit contains 150 task cards, skill and concept list, criterion referral test, answers, retrieval system, and supply source. Intermediate kit contains 110 task cards, skill and concept list, criterion referral test, answers, retrieval system, and supply source, with suggested teaching strategies for these skills and concepts.	12.00 ea.

Task Card Making Kit 10.00
48 task cards that explain to teachers how to make task cards and provide ideas for them.

How to set up a MATH LEARNING CENTER: $12.00
167 task cards for students plus instructions for teachers.

Changeover to Individualization by Thelma R. Newman 7.50
A 368 page, softcover, bound book with over 125 illustrations. It describes step-by-step, month-by-month, how to changeover from a formal to an individualized classroom. All aspects of the school are considered: the environment, evaluation, reporting and record keeping, attitudes, strategies in achieving individualization, individualizing program in language arts, mathematics, science and social studies, drama, art, music, and physical education. It contains a dictionary of terms, resource list, a complete bibliography, and an index.

Checks or purchase orders made payable to the Wayne Board of Education should accompany an order for materials, sent to:

Lida Lovett
Office of Dissemination
Division of School Programs
N.J. State Department of Education
225 West State Street
Trenton, New Jersey 08625

CONTACT PERSON FOR PROGRAMS TO INTRODUCE INDIVIDUALIZATION:

Dr. Thelma R. Newman Director
1101 Prospect Street
Westfield, N.J. 07090
(201) 232-1405

Learning Center:
Integrated Alternative to Special Education

Winslow, New Jersey

Learning Center: Integrated Alternative to Special Education, was designed to replace the isolated special education classrooms within the Winslow Township public schools. Students classified as neurologically impaired, perceptually impaired, and educable mentally retarded are not removed from the mainstream of education but, instead, are offered an educational program that includes activities in the regular classroom and supplemental instruction in a learning center. Students spend approximately half of their school day at each site. Their educational program is individualized to meet their specific needs.

The learning centers are equipped with a wide variety of programmed, individualized, and multi-media instructional materials. Each learning center is staffed by a special education teacher, one student intern, and one paraprofessional. This staff is assisted by volunteer parents, college students, and retired persons. all of whom provide a generous amount of individual attention to the students.

This program is fully described in *Resource Room Approach to Mainstreaming: an Implementation Guide.* Project materials may be purchased from the Educational Improvement Center-South; persons who wish to visit the project should contact the Director of Special Services at the Winslow Township Public Schools.

DISSEMINATION MATERIALS (set of 5 booklets below – $5 per set)

Resource Room Approach to Mainstreaming: an Implementation Guide
Resource Room Approach to Mainstreaming: Supplemental Manual
Resource Room Approach to Mainstreaming: Survey of Program Planning
Resource Room Approach to Mainstreaming: Survey of the Literature
Resource Room Approach to Mainstreaming: Bibliography

Checks made payable to Educational Improvement Center-South should accompany each order addressed as indicated below.

CONTACT PERSONS:

Visitation to project site:

Robert Gray, Director of Special Services
Winslow Township Public Schools
Central Avenue
Blue Anchor, New Jersey 08037
(609) 561-9508

Purchase Materials:

Educational Improvement Center-South
Glassboro-Woodbury Road
P.O. Box 426
Pitman, New Jersey 08071
(609) 589-3410

Prescriptive Teaching Workshop

New Providence, New Jersey

The Prescriptive Teaching Workshop is designed to raise the academic achievement of elementary school students, grades 1 through 5, who are hampered by neurological, language, and perceptual-motor problems. A Prescriptive Teaching Workshop in each of four elementary schools accommodates seriously disabled learners for part of the day. At other times, these students work in regular classrooms with individually prescribed programs. Students with less severe disabilities work only in the regular classroom but follow especially prescribed programs. The project's goal is to maintain the disabled learner in the regular classroom situation. The project was developed through an ESEA, Title III/IV-C grant from 1969 to 1972. It now serves approximately 60 students per year.

The project's evaluation results showed: 1) a significant reduction in the incidence of behaviors associated with personal frustration among participating students and 2) a significant increase in the incidence of student indication of success, adjustment, and a positive attitude toward school.

The project staff has prepared the following materials which are available to interested educators and may be requested from the N.J. State Department of Education.

Resource Manual a 67 page report on the program and description of its organization	No charge
Addendum to the Resource Manual a 25 page discussion of the preparation of teaching prescriptions	No charge
Overview filmstrip-tape	May be borrowed

CONTACT PERSONS

Joseph Romanko, Project Director
Director of Special Services
New Providence Public Schools
309 South Street
New Providence, New Jersey 07974
(201) 464-9450

(FOR PROJECT MATERIALS)

Lida Lovett
Office of Dissemination
Division of School Programs
N.J. State Department of Education
225 West State Street
Trenton, New Jersey 08625

SECTION III: Successful Educational Programs Developed in Other States and Now Implemented in New Jersey

The eleven programs described in this section were developed in states other than New Jersey, validated under the Elementary and Secondary Education Act, Title III/IV-C, and endorsed for national dissemination by the Joint Dissemination Review Panel of the U.S. Office of Education and the National Institute of Education. To date, 155 successful programs have merited this approval, of this number 145 are currently in operation with funding by USOE to offer dissemination services and materials to educators throughout the country.

Through the facilities of the National Dissemination Network, and with the assistance of the New Jersey Facilitator Project in collaboration with the Educational Improvement Centers, these eleven successful, cost-effective and replicable programs were imported into New Jersey to meet district needs. They are currently in operation in 85 districts.

Interested educators may see the programs in the New Jersey districts and receive information and training by New Jersey educators trained by the original project staffs. Information may be obtained from the regional Educational Improvement Centers as well as the contact persons indicated for each program.

* Conceptually Oriented Mathematics Program (COMP)

Columbia, Missouri

The Conceptually Oriented Mathematics Program is a diagnostic, prescriptive management program, grades 1-8, designed to meet individual needs through small group instruction. Students are tested to determine their individual strengths and weaknesses and are grouped accordingly. The program provides continuous progress through 25 instructional levels which develop ten broad concept areas. Each level is broken into two or more steps. The program attempts to meet a student's individual needs by placing him in an appropriate instructional group. It utilizes cooperative planning and teaching. Although intended to stimulate creativity in the classroom and to discourage rote learning, it is not designed as an independent study program.

Costs of adoption relate to a one day training session; the purchase of two guidebooks per teacher at $6 per teacher; and the cost of reproducing tests.

This project is being implemented in 9 New Jersey school districts. Information concerning this program may be obtained in New Jersey from:

Ron Episcopo
Field Trainer IGE
Office of Dissemination
Division of School Programs
N.J. State Department of Education
225 West State Street
Trenton, New Jersey 08625

*Approved for national dissemination

* Diagnostic Prescriptive Arithmetic (DPA)

Staten Island, New York

DPA is a diagnostic-prescriptive basic arithmetic program for grades 2-6. The Stanford Diagnostic Arithmetic Test (SDAT) is given to identify specific individual arithmetic deficiencies and conceptual weaknesses. Prescriptions provide experiences using concrete materials for concept development and activities for motivation, practice, and reinforcement to meet these needs. Work is oriented to individual and small group instruction.

A *Teacher's Manual* for the program includes more than 75 objective-based activities for counting, place value, addition, subtraction, multiplication, and division of whole numbers; record keeping procedures; diagnostic approaches; and a reference list of supplementary resource materials.

DPA suggests three alternative models for implementation of the program, depending upon a district's available human and material resources, all designed to function in the regular classroom: (1) one resource teacher and one educational assistant per four classes; (2) one resource teacher per eight classes; (3) no additional staffing required. It is essential that a minimum of two regular classroom teachers implement the program at an adoption site. A math-lab room facilitates the implementation of the program but is not essential.

Costs of adoption relate to a 3-day training session and curriculum materials ranging from $3 to $5 per child, depending upon varying grade level needs.

This program is being implemented in twenty sites in New Jersey. Information concerning this project may be obtained in New Jersey from:

Sister Judy Mertz, Assistant Superintendent of Schools
Archdiocese of Newark
17 Madonna Place
P.O. Box 818
East Orange, New Jersey 07018
(201) 484-2816

*Approved for national dissemination

* Disseminating Computer Based Planning Resources Through Project SIMU-School: The Dallas Component

Dallas, Texas

Project SIMU-SCHOOL has developed and disseminated a series of planning models drawing from operations research and other disciplines. The family of models can be utilized individually or linked together as a total educational planning package. Present models include: (1) Faculty Projection Model – predicts on a year to year basis the number and cost of teachers starting, terminating, and remaining; (2) Enrollment and Facilities Projection Model – projects school and district-wide enrollment, determines facility needs, and provides comparative reports; (3) Financial Project Model – predicts personnel by type, forecasts salaries, applies state funding formulas, and projects revenues, expenditures, and related financial data.

Adopters must have access to a medium-size computer, preferably one with time-sharing capabilities. They are provided with a copy of the source computer program of model(s) and a model user guide which includes a descriptive overview of the model. Training is minimal.

Project SIMU-SCHOOL has been transferred to Jersey City, New Jersey. Information in New Jersey concerning this project may be received from:

Peter Hahn
Process Consultant
Educational Improvement Center-NE
86 South Harrison Street
East Orange, New Jersey 07018
(201) 677-9600

*Approved for national dissemination

* Exemplary Center for Reading Instruction (ECRI)

Salt Lake City, Utah

ECRI has identified teaching techniques important for reading success. These include abilities to: elicit correct responses from nonresponding pupils; establish high mastery levels of responses with performance and rate as criteria; vary number of practices (and time) to each pupil's learning rate; correlate language arts activities to increase responses; utilize effective management and monitoring systems; and diagnose and prescribe instantly when errors or no responses occur. Techniques are incorporated into specific directives during reading, oral language, spelling, dictation, creative writing, and penmanship instruction. Student advancement depends on rate of mastery. Small group instruction occurs (keeping ahead of fastest pupil) but individual conferences are held daily.

ECRI teacher instruction varies from university classes with practicum experiences to teaching on the job. Instructional methods used by ECRI teachers are prescribed; verbal directives provided. No special staff or organizational pattern are necessary in schools where teachers use ECRI techniques.

Existing language arts and reading materials may be used. ECRI has 20 self-instructional teacher-training kits available at $20 each in lieu of inservice training, if desired.

This project is being implemented in 13 school districts in New Jersey.

Information concerning this program may be obtained in New Jersey from:

June Coultas, Right to Read Office
New Jersey Department of Education
225 West State Street
Trenton, New Jersey 08625
(609) 292-8360

*Approved for national dissemination

* FOCUS

Roseville, Minnesota

Designed to decrease the incidence of alienation among students, faculty, and the community at large, Project FOCUS provides an alternative educational plan for disaffected secondary students showing lack of motivation, lack of confidence and low self-esteem. Many also have reading problems and function in school well below their capacity socially and/or academically.

FOCUS uses a school-within-a-school approach. Students are screened for admission but enroll voluntarily and are required to be in the program for at least three hours a day, part of which is a family course using group counseling techniques. FOCUS also offers modified versions of required high school courses (social studies, English, math) as well as work experience. Biology, art, and physical education are taken in the regular school.

A combination of various teaching strategies and styles includes both group and individualized instruction. FOCUS students are involved in the development and evaluation of course materials. Results have shown significant increase in academic achievement and improved self-concept and school attitude. Implementation may be done without special staff, but by regular classroom teachers following a four day training period. Facilities and space found in any typical secondary school are adequate. Ideally the project would be allotted a cluster of classrooms with nearby office space. Overall enrollment should be limited to 75-100 students. No new materials need be purchased. A teacher manual is available.

This project is being implemented in one New Jersey district. Information concerning this program may be obtained in New Jersey from:

Sybil Nadel
Field Trainer
Educational Improvement Center-NE
86 South Harrison Street
East Orange, New Jersey 07018
(201) 677-9600

*Approved for national dissemination

* THE NEW MODEL ME: Curriculum for Meeting Modern Problems

Lakewood, Ohio

The NEW MODEL ME is a positive, preventive approach to the study of human behavior and aggression, designed to help high school students deal with available alternative actions for solving personal problems as well as their short- and long-range consequences. The curriculum incorporates the causal approach to understanding human behavior and includes much material that is affective in nature, including a variety of activities that promote student and teacher interactions.

Flexible and adaptable to student needs in a variety of school settings, the program can be used as a course in itself, to supplement existing courses, or with units selected as mini-courses. Evaluation data showed significant growth in both cognitive and affective areas.

Basic texts include a student book and a teacher's manual which suggests appropriate supplementary audio-visual materials and books. The NEW MODEL ME program can be implemented with a trained classroom teacher or counselor in a typical classroom in which chairs can be moved for various activities. No special equipment is needed. Start-up costs relate to a two-day training period and purchase of a student book and teacher manual, averaging $6 per student.

This project is being implemented in 8 New Jersey school districts. Information concerning this program may be obtained in New Jersey from:

Sybil Nadel
Field Trainer
Educational Improvement Center-NE
86 South Harrison Street
East Orange, New Jersey 07018
(201) 677-9600

*Approved for national dissemination

* Occupational and Career Development Program

Cobb County, Marietta, Georgia

The program provides career development, designed for orientation and information at the elementary level, information and exploration at the middle-school level, and exploration and preparation at the secondary level. It includes: (1) student evaluation of self-characteristics; (2) exploration of broad occupational areas; (3) introduction to the economic and social values of work; (4) introduction to psychological and sociological meanings of work; (5) explanation of educational avenues; and (6) development of decision-making process.

Six components are incorporated into all units at all grade levels: (1) hands-on activities; (2) role playing; (3) field trips into the community; (4) resource people in the classroom; (5) subject matter tie-ins; and (6) introduction to occupations in the community relevant to each unit.

Serving as unit guides are 60 teacher-developed units, K-12. Key for all participating students is regularity in interview, internalization, decision-making, and experiencing success.

Training comprises a two-day period, and start-up costs aggregate $80 for the set of 60 units, which may be reproduced by adopters as needed.

This program is being implemented in 5 New Jersey districts. Information concerning this program may be obtained in New Jersey from:

Marie Jantos
Curriculum Development Specialist
Division of Vocational Education
N.J. State Department of Education
225 West State Street
Trenton, New Jersey 08625
(609) 292-5824

*Approved for national dissemination

* Strategies in Early Childhood Education

Waupun, Wisconsin

Strategies in Early Childhood Education was established to bridge the gap between preschool, kindergarten, and 1st grade by establishing a continuous growth program. Upon entering kindergarten, all pupils undergo a comprehensive screening program in motor and language development, and auditory and visual perception, that assists teachers in planning for individual needs. Prescriptions are then generated to help children meet developmental and sequential objectives. A prescriptive guide and the learning centers are integrated to key into individual prescriptions. The pupil's progress is recorded on individual and class charts to facilitate organizational procedures. Program objectives are developmentally outlined, and learning centers are established to develop auditory, visual, motor and verbal language skills leading into reading, math and language development.

No additional staff is required though a teacher aide or parent volunteer can lend assistance in initial stages. District level support is essential to coordinate screening, secure materials, and plan further local workshops. Regular commercial and classroom instruction equipment is adapted to project objectives. The project can be implemented in traditional and open classroom setting. Costs relate to a two-day training workshop, approximately $6 for materials, and costs for learning-center activities made by teachers.

This project is being implemented in ten New Jersey districts. Information concerning this program may be obtained in New Jersey from:

Cathy Alexander
Field Trainer
Educational Improvement Center-NW
Halko Drive
Cedar Knolls, New Jersey 07927
(201) 539-0331

Dorothy Wilson
Process Consultant
Educational Improvement Center-South
Box 426
Glassboro-Woodbury Road
Pitman, New Jersey 08071
(609) 589-3410

*Approved for national dissemination

* Talents Unlimited

Mobile, Alabama

Talents Unlimited is designed to help teachers recognize and nurture in children multiple talents in the areas of: communicating; creative thinking; forecasting; decision-making; planning. Targeted for students in kindergarten through middle school, the program may be adopted for any age group, for all ability levels. Based on the multiple talent theory, it can operate within any organizational pattern.

Although schools normally emphasize the development of academic talents in students, the Talents Unlimited program helps the teacher focus on the development in students of several talent areas. Success for students in at least one talent area has been positively linked to an enhanced self-concept and improved work in other talent areas.

The program uses individualized multi-media instructional materials, a talent activity packet, a home activities booklet, and teacher's guide.

Costs relate to a 5-day training workshop; start-up costs per pupil are approximately $6.

This project is being implemented in whole or in part in 15 school districts in New Jersey. Information concerning this program may be obtained in New Jersey from:

Ted Gourley
Field Trainer
Educational Improvement Center-South
Box 426
Glassboro-Woodbury Road
Pitman, New Jersey 08071
(609) 589-3410

*Approved for national dissemination

* Project U-S.A.I.L. - Utah-Systems Approach to Individualized Instruction

Salt Lake City, Utah

The U-S.A.I.L. approach to individualized learning is predicated upon the concept that the improvement of academic skills is a continuous process resulting from regular practice of good habits, under the careful direction and guidance of a skilled teacher. Recognizing that the teacher is the key to success of any program, emphasis is placed upon "in-service" training in organization and management procedures for use of classroom space, instructional materials, record keeping, and evaluation.

Targeted for middle school students grades 4-6, the program stresses math, language arts, social studies, science and Spanish. It includes among its components: diagnosis for grouping or individualized instruction; prescriptive teaching strategies; a Skills Hierarchy and Skills Progress Chart indicating each pupil's progress; pre and post testing; a means of re-teaching when mastery is not demonstrated; student involvement in decision making and responsibility; and regular student-teacher conferences.

The program requires no additional staff or special space, and can be used with any basal series or instructional approach.

The program is operational in one New Jersey district. Information may be obtained in New Jersey from:

Betty W. Siano, Reading Coordinator
Keansburg Middle School
140 Port Monmouth Road
Keansburg, New Jersey 07734
(201) 787-7607 or 7625

*Approved for national dissemination

* Vocational Reading Power Project

Pontiac, Michigan

The goals of the Vocational Reading Power Project are to: (1) minimize or eliminate the communication-learning gap arising from differences in student reading abilities and text-reading demands in vocational education; (2) enrich teacher knowledge, attitudes, and skills as they relate to text utilization and reading-related activities; and (3) augment cognitive learning in vocational education. Designed for secondary students in a vocational curriculum, the project has attempted to reach these goals through development of teacher training materials and reading support materials for vocational students, plus extensive work with personnel representing various commercial publishing firms.

The program has developed 19 auto-instructional modules on teaching Reading in Content Areas (RCA's). These modules were developed for teacher training either on an auto-instructional basis or in a workshop/seminar mode and may be used in general secondary staff development programs. Thirty-two Occupationally Specific Key Word Glossaries representing 32 different occupational areas have been developed for student reading support.

Costs relate to a 2-3 day training workshop and purchase of the Reading Modules and Key Word Glossaries. Start-up costs approximate $15 per pupil.

This project is being implemented in two New Jersey districts. Information concerning this program may be obtained in New Jersey from:

Cathy Alexander
Process Consultant
Educational Improvement Center-NW
Halko Drive
Cedar Knolls, New Jersey 07927
(201) 539-0331

Chuck Barthe
Technical Assistant
Educational Improvement Center-South
Box 426
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Pitman, New Jersey 08071
(609) 589-3410

*Approved for national dissemination

Many materials in language arts stress basic skills for all grade levels to promote a thorough and efficient education

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